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ABSTRACT

Schools are the primary means by which society transmits skills, values, and concepts about self to youth. Without a safe and secure environment, it becomes virtually impossible for students to learn. This book reports on one project to change the atmosphere of fear in a high school. Eleventh grade students were taught the SARA (Scanning, Analysis, Response, Assessment) model of problem solving. Students took on the primary responsibility of addressing problems of fear and disorder; teachers acted as facilitators and resources along with the police resource officer. Implemented in the 1993-94 school year, the program described not only reduced crime but taught students valuable skills for life. Chapters include (1) "Crime in Our Schools"; (2) "The Police Response to School Crime"; (3) "The Charlotte School Safety Program"; (4) "Evaluating the Impact: The Research Design"; (5) "Constructing a Problem-Solving Model for Schools"; (6) "Effecting Change for School Safety"; (7) "What Works? Measuring the Impact on Students"; (8) "What Works? Crime, Fear and Teacher Satisfaction"; (9) "Comparing the Options: Modeling Responses to School Crime and Disorder." Presentations from the principal and the police resource officer to the junior class are appended along with information about the Police Executive Research Forum. (EMK)

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CRIME IN THE SCHOOLS

Reducing Fear and Disorder with Student Problem Solving

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DENNIS J. KENNEY ■ T. STEUART WATSON

CRIME IN THE SCHOOLS

CRIME IN THE SCHOOLS

USING STUDENT PROBLEM SOLVING TO REDUCE FEAR AND DISORDER

Dennis Jay Kenney
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POLICE EXECUTIVE
RESEARCH FORUM

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TABLE OF CONTENTS

Foreword ix

Acknowledgements xiii

Crime in Our Schools 1
- Trends in School Crime 2
  - The School Safety Program 2
  - The National Crime Survey 4
  - The National Adolescent Health Survey 5
  - Youth Risk Behavior Surveillance System 5
  - Joyce Foundation Survey 6
  - Weapon-Victimization 7
- Related Problems and Concerns 9
- Crime Problem, Crime Crisis 11
- Target Hardening: Locks, Bars and Metal Detectors 15
- Violence Prevention Programs for Target Youth 16
- Problem Solving in Schools 18
  - I Can Problem Solve (ICPS) 19
  - Skillstreaming 19
  - Weissberg's Social Problem Solving Program (SPS) 20
  - Summoning the Village 20
- Making Schools Safe 21

The Police Response to School Crime 25
- Relying on the Local Police 26
  - School-Police Liaisons 26
  - Anti-truancy Programs 27
  - Classroom Education 27

School Anti-drug Programs 27
The Need for a Full-time Police Presence 28
Contracting for School Security 29
The Development of School Police 29
The Trend Toward Community Policing 30
At the Core of the Concept 31
Ownership of Problems:
Core Issues in Community Policing 33
What Constitutes Community 33
Adding a Problem-Oriented Approach 35
Disorder and Fear: Evidence of Community Decay 36
Policing the School Community 37

The Charlotte School Safety Program 39
Crime in Charlotte Schools 39
School Safety Program Design 40
Planning for Police and Schools 42
Student-Teacher-Police Problem-Solving Classes 43
The Process 45
Police and Teacher Process Reviews 50
Why Should the Program Work? 50
Cultural Conflict and Transmission 51
Deviance as a Matter of Self-Control 52
The Role of the Social Bond 53
Putting Delinquency Theory into Practice 55

Evaluating the Impact: The Research Design 57
Conducting a Quasi-Experiment 58
Selecting the Experimental Sites 59
Hypotheses of Success 65
Sources of Process Data 67
Sources of Impact Data 68
The Effective School Battery (ESB) 69
School Disorder, Disruption and Disciplinary Data 70
Official Police Crime and Incident Data 71
Student Performance Data 71
The Data Collection Process 71

Constructing a Problem-Solving Model for Schools 73
Planning for Problem Solving 74
Problem Solving in Practice: The Model as Constructed 78
Identifying Problems 79
Analyzing Problems 87
Measuring Problem Strength 88
Preparing for a Response 88
Strategy Formulation 94
Narrowing the Response Options 94
After the Response is Chosen 95
Setting Realistic Expectations 95
Plan Evaluation 103
Grading Criteria for Student Problem Solving 108
Constructing a Curriculum Sequence 109

Effecting Change for School Safety 115
The Teachers' Role as Mentors 118
Mobilizing Collaborative Effort 119
What Problems to Solve? 121
The Role of the Students 122
Fear, Food and the School Lunchroom 124
Fighting on Campus 127
Phoning Home 129
Teenage Mothers in School 131
Data from the Teachers 133
Conclusions from the Process 137

What Works? Measuring the Impact on Students 141
Fear Among the Students 142
The Role of School Peers 146
What Results from the Problem-Solving Efforts 148
The Impact on Fear 149
Crime on the Campus 155
The Impact on School Performance 158
The Significance of School Friends 158
The Value of Education 160

Students' Own Views of School 162
Views of Themselves 167
Conflicts, Fear and the School Community 168
Relations with Peers and the Impact on Self 169

What Works? Crime, Fear and Teacher Satisfaction 171
Fear Among the Teachers 172
The Impact of Fear 174
Student/Teacher Responses 177
Evaluating the System 178
The Impact on Teachers 179
Teacher/Student Relations 182
Impacts on the School Environment 187
The Significance of Peers 190
Conclusions from the Teachers 193

Comparing the Options: Modeling Responses to School Crime and Disorder 195
State Departments of Education 196
The Rationale for Focusing on School Safety 197
What Works? 198
The School Safety Program 200
Determinants of Success 201
Goals of the School Safety Program 204
Problem Solving, Rational Choice and Social Control 205
A Few Concluding Thoughts 206

References 209

Appendix A: Statements of School Support 227

About the Authors 233

About PERF 235

FOREWORD

We recognize that our world is changing, and we must adapt to our environment. In the past, police enforced the laws, and schools educated our children. Those distinct roles have been changing for the last fifty years. Today's police officers play a much broader role in their communities. Their responsibilities include law enforcement, crime prevention, community problem solving, public education, and a host of other duties. Educator's roles have also expanded. Teachers spend a significant amount of time supervising behavior and less time teaching. The school's responsibilities include feeding children more than just lunch, distributing daily medications, teaching life skills, reporting child abuse, and protecting children. Included somewhere in this busy class schedule are teaching the "three R's" and computer skills.

Dennis Kenney and Steuart Watson took a new approach to issues of school safety. Students spend a large portion of their waking hours in school becoming members of a unique community with a population, environment and many of the problems of other neighborhoods. With these concepts in mind, eleventh-grade students at West Mecklenburg High School were taught the SARA (Scanning, Analysis, Response, Assessment) model of problem solving. The students took on the primary responsibility of identifying, analyzing, and addressing problems of fear and disorder as well as other quality of life issues. The teachers acted as facilitators, provided materials and resources, assigned out-of-class work, supervised data collection and problem analysis, evaluated student input, and offered guidance as needed. The police resource officer regularly at-

10

tended the problem-solving classes as an information resource and resident expert in dealing with crime and disorder.

The remainder of the students' class time during the problem-solving lesson period was dedicated to the study of american history. Teachers structure the course material to provide historical examples of team work, civic responsibility, and problem solving. Students were given the opportunity to work with information from specific events in history and propose alternate solutions to the ones used by our ancestors.

This book describes how students were empowered to make creative uses of school, student, faculty, and police resources. The West Mecklenburg High School problem-solving model gives students the power, proficiency, and partnership to develop innovative strategies for increasing safety and reducing fear in schools. The important additional benefit of the students' experience are new problem-solving skills that will benefit them throughout their lives. This book depicts how this project gives voice and action to students' creative solutions to school problems, involving students in all of its phases (from needs assessment and planning to implementation and evaluation), and entrusting them as agents of change in their schools and communities, while maintaining accountability and supervision. The book describes how students work to define and address environmental and social concerns, through attempting to change the behaviors, risk factors, or social and physical influences that compromise safety and quality of life.

West Mecklenburg High School experienced significant accomplishments when this project was implemented in the 1993-1994 school year. Students reported experiencing less fear of specific areas of the school campus and reported far fewer incidents of having to fight to protect themselves. Teachers felt safer in the schools and more willing to confront misbehaving students. School administrators reported a significant reduction in incidents requiring student supervision with the largest reduction being "student-student conflict" suspensions.

I know there will be other difficult-to-measure outcomes, including student empowerment, leadership development, in-

creased bonding to the community, understanding of problem-solving skills and techniques, and improved understanding of the rights and responsibilities of community members. The students also will have a better understanding of societal rules of conduct. While students in several of the classes initially found fault with a particular rule or regulation, their analysis highlighted a factual basis for the rule instead of the rule just being arbitrarily enacted by an adult.

The mission statement of the Charlotte-Mecklenburg Police Department places priority on prevention, problem solving, and partnership. This program takes all of these ideas into the classroom and school environment and allows students to become the practitioners that we wish all of our citizens were. This project would be of value to any government, police organization, or school system striving to make their school campuses less institutions of supervision and more places of learning.

Dennis Nowicki
Chief of Police
Charlotte-Mecklenburg Police Department

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Like any major effort, this project owes much to many. Much of the original concept for the School Safety Program came from discussions with school police in San Antonio, Texas as they brainstormed ideas to improve police effectiveness on campus. In Charlotte, Jeffry Schiller, formerly the school system's Assistant Superintendent for Research, saw the value of the concept and supported it among the teachers and school board staff. Meanwhile, at the University of Nebraska at Omaha, Dr. Vince Webb, then the chairman of the criminal justice department, provided the support for Dr. Kenney to lay the necessary groundwork that was so far from the university. As the project neared its introductino, a conflict emerged that would have caused many administrators to withdraw. Obviously, Mr. Schiller and Dr. Webb did not. Similarly, at the National Institute of Justice, Dr. Craig Uchida, formerly the research director, could have taken the easy way out and withheld funding for the research. Instead, he encouraged us to continue and ensured that the project would occur. And, of course, as we note in the project's conclusion, the results that were achieved would not have been possible without the enthusiastic efforts of the teachers, principals, students and school resource officer at West Mecklenburg High.

Throughout the length of the project, however, two people were especially important. Captain Craig Huneycutt from the Charlotte-Mecklenburg police first learned of the school safety concept while searching for ideas to advance community policing in his city. Although not involved with youth crime or schools at the time, Captain Huneycutt nonetheless was en-

thused with the project idea and made it his mission to ensure that the project was tried and that the effort took place in Charlotte. More than anyone, he overcame the inertia that kills so many multi-agency efforts. Equally important was Marnie Deacon (later Kenney) who never wavered in her support, provided the encouragement that was necessary, and embraced the many obstacles that came our way as her own personal challenge. But for the two of them any one of many problems would have been the end.

1 CRIME IN OUR SCHOOLS

The most dangerous thing we ask of our children is to go back and forth to school everyday. We tell our children: Good morning; pay attention in school; be good... We don't say what is in our hearts: Come back alive; come back to me this afternoon.

Brooklyn mother
(*New York Times* 1990)

Our schools are the primary means by which society transmits skills, values and concepts about self to our youth. A positive school experience is a major factor in helping young people develop into productive, law-abiding members of our society. Within the past few years, however, many of our schools have become sites of crime and disruption, making learning difficult in a climate of fear.

Without a safe and secure environment, it becomes virtually impossible for the school to provide a positive social atmosphere. The President's Working Group on School Violence and Discipline noted that in such environments, even those students who are interested and desire to learn will find it difficult due to fear and distractions (Office of Juvenile Justice and Delinquency Prevention 1986a). The committee affirmed that an orderly school environment is essential to the learning process; the disorder in some American schools is sufficiently severe to cripple the education process.

Trends in School Crime

Forty years ago, surveys of public school teachers indicated that the most pressing classroom problems were tardiness, talkative students and gum-chewing (National Institute of Education 1978). Today, however, there are far more serious complaints from not only teachers and administrators, but from students as well. Among the concerns frequently cited are the presence of drugs, gangs and weapons on campus and the threat of assault, robbery, theft, vandalism and rape (National School Safety Center Winter 1989). Even the popular media, such as *Time* magazine and *U.S. News and World Report*, have reported that the problems in our nation's urban schools may be paralyzing the system (Garrison 1989; Hall 1993; Toch, Gest and Guttman 1993).

While rigorous studies producing reliable data on school crime and victimization are rare, some research is available. For example, according to a report from the National Center for Education Statistics (1989), disruptive student behavior increased during the five-year period from 1982 to 1987. Worse yet, survey research by the American Federation of Teachers (National School Safety Center Fall 1989) suggests that the presence of drugs and weapons on campus is substantially increasing student violence. Similarly, the Federal Bureau of Investigation (1994) and the National School Boards Association (1993) reported that three million thefts and violent crimes occurred on or near school campuses in 1993, the most recent year for which data are available. This results in almost 16,000 crimes per day occurring in or around our schools. While informative, even more telling are the results from the few national research programs that have examined the problem in greater depth.

The School Safety Study

The first comprehensive look at school crime and safety was undertaken in 1978 by the National Institute of Education. In this study, data were collected from several key sources, including principals in more than 4,000 schools, more than 31,000 students and nearly 24,000 teachers. These respondents were selected from both large and small cities as well as from suburban and rural areas.

From the principals, researchers gained an overview about crime in our schools. When asked how serious a problem vandalism, personal attacks and theft were at their schools, nine percent reported these problems as either "fairly serious" or "very serious." In large cities, however, the percentage of high school principals reporting these as a serious problem approached 30 percent (Berman and McLaughlin 1978:35-36). From the students and teachers, even more disturbing results emerged. Although students spent about 25 percent of their active time at school, about 36 percent of the assaults and 40 percent of all robberies of teenagers occurred there. In fact, from the students and teachers, the authors made national projections that during a typical one-month period

- 282,000 students and 5,200 teachers are physically attacked at school, with 4 percent of the students and 19 percent of the teachers requiring medical attention;
- 112,000 students and 6,000 teachers are robbed while at school;
- 2.4 million students and 128,000 teachers have property stolen from them while at school;
- one of every ten schools is broken into – a rate five times higher than commercial places of business; and
- over 25 percent of schools are vandalized at an estimated cost of more than $600 million per year.

In cities with populations over 500,000, the problems in high schools were even greater. In those cities, the findings from the Safe School Study indicate that

- about 7 percent of the high school students stay at home at least one day each month out of fear;
- approximately 24 percent of students avoid three or more places at school because of fear of victimization;
- over 29 percent of teachers are threatened with physical harm each month; and
- over 28 percent of teachers hesitated in the last month to confront misbehaving students for fear of their own safety.

In all, the authors concluded that crime, violence and the fear of both are major problems in our schools, especially in big

city high schools. Still, from their reanalysis of the surveys, Gottfredson and Gottfredson (1985) concluded that the study's data argue that the problem of school violence may, in fact, be no worse than in comparable segments of our society. Of course, their finding does not suggest that the significance of the problem or the need for effective responses is diminished. Rather, as our nation's schools begin to mirror our admittedly violent society, children of all ages may find it increasingly difficult to concentrate and learn.

The National Crime Survey

The Bureau of the Census has undertaken an ongoing major study of school criminal activity (National School Safety Center Winter 1989). The data collected by this survey represents the views of almost 21.6 million students 12 to 19 years old (Bastian and Taylor 1991). The results from the 1989 survey indicate that

- more than three million students, teachers, staff and visitors were victims of criminal acts while on school property;
- more than 500,000 violent crimes -- assaults and robberies -- occurred in or around schools;
- most students know where and whom to contact to purchase drugs on school property;
- students avoid specific places at school to reduce the likelihood that they will be victimized; and the fear of victimization is a significant factor in absenteeism; and
- the prevalence of street gangs in schools significantly disrupts the educational process and encourages criminal behavior.

Despite an 8 percent decrease in the school population since 1982, the National Crime Victimization Survey shows that the number of violent crimes remains high and that students remain fearful of being victimized at school. Surprisingly, researchers found few differences in victimization rates that could be attributed to gender, race or school location. In other words, males and females; blacks, whites, and Hispanics; and

children in urban, suburban and even rural schools self-reported becoming the victims of crime in numbers equal to their representation on campus (Bastian and Taylor 1991; Whitaker and Bastian 1991). Researchers did find that crimes committed in school during school hours were less likely to be reported to police than crime committed either on school property or on the street. Police and others attempting to study school crime have long acknowledged that many school administrators have been reluctant to compile accurate crime statistics or consistently report crimes to protect the image of their school or school district (Wayson 1985). If so, the early data from school districts, police and state departments of education may underestimate the number of crimes actually committed in schools.

The National Adolescent Health Survey

The American School Health Association (1989) surveyed approximately 11,000 eighth- and tenth-grade students in 20 states in 1987 about a wide range of issues concerning their experiences while at school. This study found that 2 percent of the surveyed students (approximately 338,000 nationwide) reported that they carried a handgun to school at least once a year. A third of those studied indicated that they carried a pistol *daily*. About eight times as many students said they carried knives. The potential for violence is obviously great, as substantiated by the finding that over a third of tenth graders reported that someone had threatened to hurt them while they were at school. Further, nearly 14 percent of the students surveyed reported being robbed while at school, with similar numbers reporting a physical attack, either while at school or on a school bus. The devastating effects of these crimes reach beyond the actual victims to the far greater number of students who witness them.

Youth Risk Behavior Surveillance System

The Centers for Disease Control and Prevention conducted a national survey regarding adolescent fighting both on and off

school campuses. In this survey, students self-reported the number of physical fights they were involved in during the previous month. Data from the 1990 study (1991; 1992) indicate that black students were more likely to report having fought than either white or Hispanic students (12.5%, 6.2%, and 10%, respectively). Nor is it surprising that males reported a significantly higher involvement in fights than females (50% vs. 34%). Although some may question the importance of these findings on fighting, especially when compared to more prominent concerns such as drugs or weapons, Olweus (1991) notes that minor altercations between students often escalate to more serious violence. One caution is appropriate, however, since the actions reported in this study reflect student behaviors across settings and are not specific to schools alone.

Joyce Foundation Survey

Among the most recent national surveys to address school crime, violence and safety was a survey of 2,508 students in grades six through 12 from a sample of public, private non-Catholic and Catholic schools from throughout the country (Harris 1993a; 1993b). The results of this Joyce Foundation-funded study are consistent with those from the Youth Risk Behavior Surveillance System: 20 percent of students from suburban schools and 19 percent of those attending central city schools reported involvement in a physical confrontation while at school during the previous year. In addition, 4 percent of these students reported that they carried a gun, 15 percent reported carrying a knife and 3 percent reported carrying a club to school during the same period. These results also correspond with those from Callahan and Rivara (1992) who surveyed one-half of the eleventh-graders (1,119) from Seattle's public schools during the 1990-91 school year. They found that seven guns, 58 knives and 67 other weapons had been confiscated during the school year. In addition, problem or deviant behaviors (gang membership, assault and robbery or striking a teacher, for example) were highest among students reporting gun ownership (6%) and those who reported having easy ac-

cess to guns (34%). In short, given the number of students carrying weapons to school, the potential for violence is obviously high. Further, since students are often aware when their peers bring weapons to school, a sense of fear and uneasiness regarding the school environment is perpetuated. This fear can be seen in the small numbers of both students (21%) and parents (24%) who report that young people "are safe from violence in the school" (Harris 1993b).

Weapon-Related Victimization

Finally, the National Institute of Justice funded research to explore the nature and extent of victimization among students in inner-city high schools. Researchers surveyed 1,591 students in 10 schools from California, Illinois, New Jersey, and Louisiana. These researchers (Sheley, McGee and Wright 1995) learned that one in five inner-city students (one in three males) had been shot at, stabbed or otherwise injured either while at school or on their way to their campus. While the authors cautioned against generalizing from their results, since the participating schools were deliberately selected for their experience with weapons-related violence, the conclusions were sobering. For example, although the average student responding had reached only the tenth grade, nearly one-third (43% of males, 14% of females) had already been arrested or picked up by the police at least once. Further, nearly 25 percent reported affiliation with a gang of some kind, 15 percent reported involvement in a theft of substantial property, and almost 13 percent said that they had either sold drugs or had worked for someone who did. Twenty percent of these students also reported being the victim of an assault, with more than half experiencing multiple victimizations.

Concerning the school environment:

- Two-thirds of these students personally knew someone who carried a weapon to school, while one-fourth reported possessing weapons themselves.
- Two-thirds personally knew someone who had been shot at, stabbed or otherwise assaulted while in school.

- One-third either agreed or strongly agreed that "there is a lot of violence in this school."

Concerning their communities:

- Forty percent reported that male relatives carried guns outside their homes.
- One-third had friends who carried guns outside their homes.
- One-fourth considered guns easy to get in their neighborhoods.

Not surprising, the authors also found that high-risk activities – including theft, weapons possession and gang membership – increased the likelihood of victimization. This finding is especially troubling because research suggests that about 14 percent of high school students across the country joined a gang during the 1993-94 school year (National Parents' Resource Institute for Drug Education 1994). Gang members frequently use school grounds as a prime recruiting ground for new members (Wheeler and Baron 1993), which often causes fear and concern among students who are not gang members. The Institute for Social Research (1990) confirms that nearly 92 percent of high school students worry about crime and violence, especially while at school.

At least partially in response to their fear, more than 9 percent of ninth graders, 10 percent of tenth graders, and 6 percent of twelfth graders admitted bringing a weapon to school at least once during the month previous to the study (National Educational Goals Report 1993). Similarly, results from a National School Boards Association (1993) survey estimate that more than 135,000 guns are brought to school nationally each day. Clearly, with this number of students reporting weapons possession in school, the potential for serious harm to both students and teachers is high and especially so in our inner-city schools. Indeed, a Gallup Poll (1994) indicated that students who bring weapons to school tend to use them to settle disputes - more than 21 percent of students reported being attacked with a knife or gun and 63 percent reported being physically attacked.

Data reported by the National Parents' Resource Institute for Drug Education (1994) indicate that 7 percent of all high

school students carried a gun to school during the 1993-94 school year and that 35 percent threatened to harm either a peer or teacher while at school. A Metropolita Life survey (1993) noted that 23 percent of students and 11 percent of teachers have been victims of violence in or around schools. Given the levels of violence in schools and the increasing prevalence of weapons, it is not surprising that 22 percent of public school students surveyed were afraid of being attacked while on campus. In addition, public school students have been twice as likely as private school students to avoid specific places at school out of fear (Bureau of Justice Statistics 1991). In Metropolitan Life's survey, teachers reported that they were most concerned about violence in hallways, stairways and lunchrooms; students were more concerned about restrooms.

Related Problems and Concerns

School crime and fear of crime are not only inner-city problems. For example, in 1986, the Gallup Poll found for the first time that the public identified drug use as the most important problem facing our public schools. At that time, nearly two-thirds of high-school-aged youths had used illegal drugs, and 40 percent had used drugs other than marijuana. Teenagers themselves said drug abuse was the biggest problem they faced in school, according to the 1984 Gallup Youth Survey. While the number of high school seniors who said they had used illicit drugs at least once declined during the late 1980s, there has been no such decline in the reported use of crack cocaine (Institute for Social Research 1990). The Gallup survey, funded by the Institute for Social Research, also noted that over 50 percent of high school seniors had tried an illicit drug during their high school years, with 20 percent stating they had used these drugs during the past month. The percentage of seniors reporting the use of crack during the past year did not mark a shift from previous years.

Recognizing the seriousness of crime and fear in schools and their impact on the learning environment, California voters

in 1982 passed a referendum that includes the provision that follows:

> All students and staff of the state's primary, elementary, junior high, and senior high schools have the inalienable right to attend campuses which are safe, secure and peaceful.

This initiative, better known as the "Victims' Bill of Rights," led to annual statewide reporting of school crimes. Unfortunately, within only a few years, a regular increase in personal crime was observed (California State Department of Education 1988). Although property crime incidents declined somewhat, students' possession of guns and knives in high school and junior high appeared to rise.

There also appears to be a link between students' carrying guns to school and using drugs: those reporting gun possession were 14.5 times more likely to disclose cocaine use, twice as likely to drink alcohol and three times more likely to smoke marijuana than were other students. In Washington state (Office of Superintendent of Public Instruction 1994), student surveys found that as their alcohol and drug use increased, so too did the likelihood that they would carry weapons to school or be involved in fights that resulted in injuries requiring medical attention.

In summary, the incidence of both violent and property crime on our nation's high school campuses significantly increased during the past three decades (National Institute of Education 1978; Office of Juvenile Justice and Delinquency Prevention 1986; National School Safety Center Fall 1989; and Garrison 1989). Although the number of larcenies and thefts did decrease during the late 1980s and early 90s - corresponding with the decline in school enrollment - violent, person-to-person crimes remained at alarmingly high levels (National School Safety Center Winter 1989; and National Center for Educational Statistics 1989). Moreover, the incidence of drug and alcohol use among high school students continued to be a significant problem, with many youths reporting regular monthly and/or daily use (Institute for Social Research 1990).

The consequences of the extensive crime, disorder and drug use problems in our schools may be far more serious than their numbers alone suggest (Toby 1983). Under these circumstances, it is difficult for our high schools to be the orderly, safe and secure places they must be if effective learning is to take place. Indeed, much research notes that not only are truancy and disruptive behavior in schools related to academic failure, but that each may contribute substantially to the development of delinquent careers (Graham 1988; Cernkovich and Giordano 1992). These behaviors result in low commitment to the educational process, alienation, low self-esteem and skepticism about belief in the legitimacy of the rules governing society. In turn, these attitudes have been shown to lead to student involvement in other delinquent activities (Gottfredson 1986).

Crime Problem, Crime Crisis

With results such as these, and the occasional occurrence of a spectacular incident such as the 1997 on-campus shooting of students in Kentucky (*Washington Post* 1997), some observers are now calling for swift and forceful action to make our schools safe again. Far from simply popularist rhetoric, the foundations for these calls for change are important since there are only three ways to respond to school crime issues. Indeed, the path selected will not only succeed or fail based on the reality of the school crime problem, it will have important implications for education and the school environment. As such, an objective look at the nature and extent of crime and fear on campus, as well as the research that examines it, is a critical first step in the planning process for a response.

An initial issue of concern is the bias inherent in most school crime research. Virtually all existing studies of school crime begin with the *presumption* that violence is a problem – the researchers' unstated goal confirmation. As Furlong and Morrison (1994) note, "rarely has a disconfirmatory hypothesis-testing strategy been employed." Indeed, we would go further and suggest that little real hypothesis testing of any type takes place. In addition, many of the often cited researchers and

practitioners examining school crime issues have a stake in the outcome—either organizationally or because they have a program or intervention to test. If fear and crime aren't a problem, then they cannot very well make things better.

Additionally, there is the nature of the studies themselves. By reviewing the three basic methods employed by nearly all the efforts to assess school crime and violence, considerable variation in the validity and reliability of the data gathered can be seen. For example, in the first method, school officials are surveyed to learn about the nature and extent of the crime problems on their campus during some specified period of time, usually either the preceding month or the current school year. Of course, their awareness of events is likely limited and, in many cases, incentives to under or over report may exist. More systematic errors are also likely since no standardized methods of data collection, or even data definition, exist.

The second method relies on victimization surveys where students (and staff) are asked to recount their actual victimizations over some specified period of time. Aside from the general problems of victim surveying, the time periods in many of these studies are inexact. Definitional problems exist here as well (what constitutes an assault or theft), and there is considerable evidence that students have trouble separating in-school victimizations from those on the way to or from school, and those that occur after and away from school.

The third, and perhaps most common, method used, employs opinion surveys that ask students and staff their opinions about school crime. These are the weakest of the three approaches since they do little to measure actual incidents. While they do measure levels of concern, these methods are likely influenced by respondents' overall fear and perceptions about violence. Having examined these methods, it is useful to review the data again.

First are the attitudinal measures. As we noted earlier, in the Joyce Foundation study only 21 percent of students and 24 percent of parents reported that "most students" are safe at school, suggests a high level of concern. However, when asked

further, only 23 percent of those students and 28 percent of the parents indicated that most youths "live in homes safe from violence." This would suggest that their concerns are more general and not focused uniquely on the school setting.

Similarly, when the Urban Coalition of Minneapolis (1992) and the Delaware Health and Social Services (1993) conducted their own surveys asking students to identify the issues that they were most worried about, how they were doing in school and their looks were at the top - school safety and violence were not. The lesson to remember is that in evaluation of students' safety concerns, how the questions are asked matters. How the results are interpreted does as well. Furlong and Morrison (1994) caution school psychologists that "schools address school violence and safety issues, it will be important to place concerns in the perspective of the total school mission."

As for the victimization reports, serious definitional and comparability problems exist. For example, while the Centers for Disease Control and Prevention (1992) report fairly high rates of student fighting, they do not distinguish between fights that occur on and off campus. In addition, it is not entirely clear when a fight constitutes a criminal assault. In one survey (Mansfield, Alexander and Farris 1991) concerned with physical attacks on teachers, any aggressive physical contact by a student (including being kicked by a first grader), was included. Since no national reporting standards exist, comparisons across surveys can be tricky.

And what of the time frames? The National Crime Survey asked about incidents that occurred during the previous six months - a time period that included summer months when school was not in session. The Violent Schools - Safe Schools study asked for information over a one-month period, while the American School Health Association asked about events occurring during the past year (see Furlong and Morrison 1994). Clearly, extrapolating national trends from these data will require considerable caution.

Finally, the data itself suggests that school crime issues are more complex than the often-cited research shows. While the

actual numbers of crimes on campuses are large, when we remember that millions of students attend hundreds of thousands of schools each day, the actual risk to any single student is far less significant. As discussed earlier, Gottfredson and Gottfredson (1985) concluded that the school violence problem is, in fact, no worse than in comparable segments of society. Further, when crimes do occur in school, they tend to be primarily minor incidents; serious victimizations are rare. While the Centers for Disease Control (1992) estimate that 7 percent of students reported being threatened or injured with a weapon while in school, other research suggests that much of that may be the result of typical school-yard bullying (Batsche and Knoff 1994). Hoover and others (1992) report, in fact, that nearly 75 percent of students have been bullied at some time in their school years. Of course, this is not to dismiss these incidents or suggest that the need for effective response is diminished – far from it – it is only to put the issue into perspective.

That roughly 35 percent of violent crimes and 81 percent of property crimes experienced by 12 to 15 year olds occur on school grounds, although only 18 percent of their waking hours are spent there (Gottfredson 1996), makes school crime a problem. That the vast majority of those crimes involve relatively minor incidents means that, with few exceptions, it is not a crisis. It is likely then that the school crime problem varies by level:

- a few schools confront a crime crisis;
- some schools have a crime problem; and
- most schools experience a regular occurrence of incidents of disorder.

If so, matching the response to the nature and extent of the problem becomes especially important since efforts to respond to sensationalistic portrayals of school violence may bring a prison-like atmosphere and be unnecessarily intrusive in an otherwise safe school setting. Indeed, the choices available offer variations on but three distinct approaches to school safety. Since each model offers an assortment of conflicting programs, often designed to accomplish dramatically different results, the

path selected will be especially important to students, staff and the educational process itself.

Target Hardening: Locks, Bars and Metal Detectors

Most of the more popular responses to school violence today involve efforts to invoke technology to secure each school, making it physically difficult for students to bring weapons onto the campus. Proponents of this approach follow the lessons from airport security in the belief that a visible presence will deter students from attempting to carry most weapons on school property. Even where deterrence fails, however, these advocates argue that if properly deployed, their methods make the detection of most weapons almost certain. This, in turn, allows school security to prevent trouble before it occurs. Depending upon each school's resources and physical design, this approach usually involves not only tightened security procedures, but metal detectors - either mobile or stationary - at each entrance to campus.

Where stationary detectors are used, the intent is to screen out weapon holders as they enter school. By limiting access and requiring all students to pass through a secured main entrance, not only can improper items be discovered and seized, but access to campus by unauthorized visitors can also be limited. While less comprehensive, mobile detectors allow school security to move about on random campus patrols. Usually preferred on more open campuses, the devices allow for more aggressive security as loitering students are questioned and scanned, and the reach of school security is extended to parking lots and passages leading to school property. Although mobile detectors are less disruptive initially, they may, in fact, be more intrusive to the overall school setting.

First becoming popular in the mid-1980s, perhaps the most publicized efforts to "target-harden" schools include a 1988 test that was declared successful in several New York City schools (Berger 1991) and a recently built Dallas school being touted as "the most security conscious school in the nation" (Law Enforcement News 1995). Despite declarations of success, how-

ever, many criticize these target-hardening approaches to school safety. Recognizing traditional conflicts between educators and police, some have wondered if such an oppressive environment of security might not worsen relations and harm the educational process. Further, as all students (and others) are forced to enter their campuses through a single point, what unintended consequences might result as delays for false positives become common? For example,

- Will student conflicts be heightened as they often are when lunchroom procedures produce congested movement?
- What is the impact on school scheduling as security personnel are unable to smoothly process those attempting to enter?
- Will students purposely create false positives in an effort to slow the process and interrupt the school day? Many use fire alarms for similar goals already.
- If the entry system is slowed, are searches restricted, thereby increasing the likelihood of failure?
- Might weapons possession increase as students demonstrate their skills at beating the system?
- Finally, is it possible to secure a high school campus not built (or designed) for such tight security lockdown? Our experience in securing prisons offers little optimism for success.

Although each of these possibilities are likely to occur, contingencies are seldom included in plans for implementation. As a result, critics of the target-hardening approaches have concluded that while the concepts of security through environmental design may be helpful in schools, a reliance on these methods alone may be both ineffective and harmful to other educational goals.

Violence Prevention Programs for Target Youth

A second approach is treatment-centered and includes efforts to identify children most likely to commit violent acts during school so that counseling and skill-building can be offered. Most often, these programs focus on impulsive or aggressive children who lack the necessary social competencies to adapt appropriately to the school environment and responsible peers.

Typically, these children have exhibited previous tendencies to behave aggressively and often come from families that model and endorse such behaviors. In addition, the parents of these children often rely on coercive parenting, which has been established as a strong predictor of conduct problems in adolescence (Reid and Patterson 1991).

Perhaps the best known treatment programs are the *Second Step* violence prevention curriculum (Committee for Children 1992) and the *Violence Prevention Curriculum for Adolescents* (Prothrow-Stith 1987). *Second Step* is intended for preschool children through the fifth grade, while *Violence Prevention* is intended for high schoolers. Both are meant to be integrated into the existing curriculum.

Second Step targets empathy, impulse control and anger management (called skill areas) by presenting cards with pictures of children engaging in various activities. On the reverse side of each card are instructions for teachers to follow for a related lesson. Students learn appropriate skills by responding to teacher questions regarding the interaction on the card, watching the teacher model the skill and role-playing the same or similar scenarios. Other instructional procedures, which are embedded in the curriculum include limited problem solving, behavior rehearsal, self-instruction and other forms of behavioral modeling.

The *Violence Prevention Curriculum* was designed to prevent fighting among high school students, primarily by increasing knowledge about violence and its effects and then introducing anger management. This curriculum focuses on data from homicides and other violence, both nationally and in the student's own community. Anger is then explored as a natural emotion, the consequences of fighting as an expression of anger are evaluated, and the components involved in fights are analyzed. The instructional methods offered include didactic presentation of statistics, videotaped student-scripted role plays and discussions of alternatives to fighting.

Despite the popularity and generally good reactions to both programs (National Institute of Justice 1994), no data to support claims of program impacts in the prevention of violence over

time appear to exist. Although both programs may increase knowledge about violence and anger and improve behavior in the short term, long-term behavioral changes are necessary before either method can properly be labeled effective. The assumptions supporting these programs - that students lack the appropriate social skills to avoid violent behavior - in fact, often do not hold true. For example, some students report violent acts that are intended solely to extort money, protect turf or prove allegiance to friends.

Problem Solving in Schools

In the Astoria section of Queens, the Mott Haven section of the South Bronx, and the Lower East Side of Manhattan, communities have come together over the past two years, in ways not previously envisioned, under Project HighRoad, a school community-based substance abuse program developed by the Fund for New York City Public Education and the United Way. Project HighRoad engages the community by asking them to identify their needs and then develop strategies to meet those needs. The program brings together parents, school staff from the designated middle school, police officers, tenant leadership from the local housing development where the majority of children attending the middle school live, clergy, community-based organizations, and local business (Travis, Lynch and Wagner 1993).

Problem solving at the individual level is considered an essential skill for social adjustment and effective decisionmaking. In fact, many commercial curricula are available that focus on teaching students how to problem solve and how to incorporate their problem-solving skills into everyday life. While there are a great number and variety of problem-solving packages available, each is focused generally on giving students (though teachers, parents and the community are usually included) increased responsibility for activating meaningful change in their school environment. As these approaches are reviewed, how-

ever, it is important to remember that student empowerment is not synonymous with unrestricted freedom. Instead, a problem-solving focus concedes that since it is the students who have the most to gain (or lose) in the educational process, they, more than anyone should possess the means to further their investment.

A sample of student problem-solving approaches are described below.

I Can Problem Solve (ICPS)

The ICPS (Shure 1994) program has been in use for nearly 25 years. The program focuses on high-risk (defined as impulsive or inhibited) children in kindergarten through sixth grade. It teaches problem solving through games, puppets, role playing and stories. Results of a recent five-year longitudinal study indicate that both interpersonal skills and academic performance increased as a result of the program's activities. Still, positive results were not maintained over time without follow-up sessions.

Skillstreaming

The Skillstreaming curriculum (Goldstein et al. 1980) is geared toward improving the prosocial skills of adolescents. Specific target skills include making friends, choosing alternatives to aggressive behavior, making decisions, classroom survival and dealing with feelings and stress. The skills are taught via modeling, role-playing and performance feedback. In a study of the Skillstreaming program with students diagnosed as emotionally disturbed (Miller, Midgett and Wicks 1992), teacher ratings indicated that after six weeks of training, students had improved their social skills in each of the targeted areas. Some caution must be urged when interpreting the results of this study, however, because of the indirect nature of the outcome data (i.e., rating scales as opposed to direct observation). It is equally plausible, for example, that it was teachers' perceptions that were modified as a result of their knowledge that children had been involved in the Skillstreaming program.

Weissberg's Social Problem Solving Program (SPS)

One of the more interesting problem-solving curricula available is the SPS (Weissberg, Jackson and Shriver 1993). This program teaches students a six-step process to follow when faced with social or personal dilemmas:

1. Stop, calm down and think before you act.
2. State the problem and how you feel.
3. Set a positive goal.
4. Think of lots of solutions.
5. Think ahead to the consequences.
6. Go ahead and try the best plan.

Elias and Weissberg (1990) assessed the effects of the SPS program by comparing students who received the program with those who had not. Results indicated that students who received the training were better able to devise cooperative strategies to hypothetical problems and rated assertive and cooperative strategies to solve interpersonal conflict higher than students who did not receive the training. As with other programs, however, considerable caution is appropriate because of the artificial nature of the outcome assessment. Although students may be better able to brainstorm cooperative solutions to a hypothetical problem, there is no assurance that they will either do so in a real situation or actually use the solutions they have devised. In addition, endorsing cooperative strategies to solve interpersonal conflict is a long way from actually using such a strategy to peacefully resolve an interpersonal problem.

Summoning the Village

Building upon the widely cited African proverb that "it takes an entire village to raise a child," this ongoing project is a collaborative effort among students, their parents, teachers and police to identify the conditions that expose children to violence and jointly develop a variety of interventions to address them. Essentially, the concept being applied is an effort to expand the Comer School Development Program (Comer 1988) to include police and their problem-solving approaches. Building upon years of research in the New Haven (CT) public schools, the Comer model begins with a School Planning and Management

Team composed of school staff, parents and others who work together to identify school problems and develop solutions. A second group, consisting of school counselors, social workers and psychologists provide support through child development consultation. As Marriott (1990) describes the model, the Comer approach works toward three main goals:

> to induce parents to participate in the school's life; to force school administration, teachers, and other staff to share authority in managing the school; and to bring guidance counselors, mental health professionals and teachers into a team that meets regularly to combat behavior problems.

While the early results in schools implementing the Comer model are promising, with proponents claiming improvements in attendance, academic performance and social development, to date, none of the pilot efforts have included the police as a part of the support system for the school's development. *Summoning the Village* makes just such an effort. Although the project is underway in a Charlotte (NC) middle school, at this writing it has reached only its midpoint. As such, results from the effort are not yet available.

Making Schools Safe

Morrison, Furlong and Morrison (1994) assert that having safe schools is an educational right. Further, they contend that safe schools are not merely places where there is an absence of violence but also a place where children feel psychologically secure. As such, not only should students be free of actual violence and criminal behavior, but events that create a sense of psychological distress should be avoidable as well. If not, the schools will become difficult places to learn, while the likelihood that others will model aggressive or violent behavior and reduce the quality of school life for all will increase.

To accomplish safe schools, we believe that an approach that offers problem solving focused on system/environmental issues is appropriate. While target-hardening methods appeal instinctively, the potentials for damage to the educational environment and process threaten the very institutions they seek to preserve. Meanwhile, even prisons with their extreme reliance

on technologically assured security are seldom viewed as safe. Similarly, even the most popular violence prevention programs focus at the individual level apparently in the belief that schools can be made safer if only individuals' behaviors can be modified. While desirable, the evidence of impact is questionable at best.

Though some might argue that support for a student-based problem-solving approach to school crime is also limited, the appeal of such models is intuitive and well-supported conceptually from at least two important perspectives. First, support for such an approach can be found in the limits of the criminal justice system. After recognizing that crime and fear are closely linked to the perceptions of disorder, many (perhaps most) reformers now accept the weaknesses of technological solutions to crime problems and promote instead increased roles for communities. For example, rather than assume a traditional reactive, or even proactive, approach to problems, these advocates call for a *coactive* function that stresses partnerships between officials and the citizens they serve (Oettmeier and Wycoff 1996). Since the formal justice system is empowered to intervene primarily only after an incident has occurred, prevention and early intervention efforts, they contend, are largely beyond its capabilities. As such, citizens working through the informal norms of social control, have the best chance of engaging their fellow community members in the discussion and settlement of differences (Shonholtz 1995). Out of these informal resolutions comes the general sense of cooperation and civility upon which safe communities depend. It is support for increased community empowerment that has led both to community and problem-solving policing and the School Safety Program described here.

Second, and equally convincing, is the role for peers in the educational process and the development of deviance careers in juveniles. Early on, Sutherland (1947) theorized that delinquency and deviance are learned through intimate associations with peers who have attitudes favorable to misconduct. More recently, the role of peers (Steinberg, Dornbusch and Brown

1992) and the process of bonding to one's school (Cernkovich and Giordano 1992) have each been established as important determinants of educational behavior and performance. Student-based problem solving as it was tried at West Mecklenburg High School (West Meck) builds from each of these perspectives by enlarging the pool of peers each student must interact with and by focusing those interactions on positive and socially desirable goals.

In the pages that follow, the role of the police generally in the response to the problems of school crime and fear as well as the specific School Safety Program attempted at West Mecklenburg High School will be reviewed. The lessons that were learned we believe offer considerable promise for the future.

2 THE POLICE RESPONSE TO SCHOOL CRIME

Educators and the police first recognized that crime and violence were beginning to permeate our schools in the late 1950s. By then, student misbehavior in the inner cities of our largest urban centers had become sufficiently noticeable that federal hearings were held to determine the scope and source of these disruptions. *The Blackboard Jungle* became a metaphor for our major urban schools.

By the early 1960s, state and local jurisdictions also began to focus on school security, although agreements about what to do were elusive. While mandatory attendance laws and school and police responsibility to discipline students were already well established, court limits to "Parens Patriae" and the perception that public policy was contrary to effective controls led to generally conservative views on school crime issues.

As the decade progressed, economic issues entered the discussion. On one hand, scarce resources left school policing as a secondary priority on both school and police agendas. Legal liability, on the other, exposed schools that failed to take steps to create a safe environment (or did so improperly) for staff and students. In the end, school districts across the country found themselves faced with an enormous dilemma. Should they invite the police in as permanent residents of their campuses or should they simply ignore the problems of crime and violence? Should existing school personnel be pressed to add security services to their duties (departments of maintenance often became departments of maintenance and security) or should off-duty or retired police officers be contracted for more profes-

sional services? Or, perhaps, a major commitment to a full-fledged department of security, or even school police, might be appropriate. Unfortunately, in few instances were systematic data on crime or safety problems available, so most districts could do little but react to the problem definitions and priorities set by others from outside their systems. Soon the costs and benefits of the various options - let alone the costs of doing nothing - began to be apparent.

Relying on the Local Police

Prior to end of the 1960s, a city's police were generally used by local school administrators only in response to specific problems - to break up a fight, to check out a vandalism incident or to check traffic around the school. Even then, it appears that whenever possible, principals and school administrators preferred to avoid the criminal justice machinery in favor of internal discipline processes. By the close of the decade, however, police and educators began to develop closer working relations as school riots, drugs and other problems of the times began to appear. As a result, since the mid-1970s there has been a steady refinement of police/school roles, particularly as police/student contacts and crime prevention have become increasingly viewed as important. The most common efforts have been school-police liaison programs, school resource officers, anti-truancy programs, classroom education programs and anti-drug efforts (Kenney, Pate and Hamilton 1990).

School-Police Liaisons

These programs assign officers to individual schools where they function primarily in a preventive, proactive role to address youths' problems. These officers are responsible for investigating incidents and enhancing police-student relations, as well as providing assistance to students, faculty, staff and administrators on problems related to law enforcement. School resource officers are similar to liaison officers; the officers identify and counsel youths at risk and divert them from the juvenile justice system.

Anti-truancy Programs

Many city police departments pay particular attention to truancy and the numerous problems associated with it. Traditional police responses have included returning students to school, transporting them to the police station where parents can be notified or, as a last resort, booking truants for formal case processing. Other, more comprehensive efforts have involved coordination among the city police, school district, probation and social service agencies.

Classroom Education

These projects were developed in response to the social unrest of the 1960s and 1970s. The *Law-Related Education* programs were prime examples of these efforts. These police-taught courses were developed for both elementary and secondary students and were designed to promote a better understanding of the role of the law and the police as they affect youth in the community (Pursuit, Gerletti, Brown and Ward 1972). The basic assumption of these projects was that youth need to understand the consequences of their actions in order to avoid delinquent behaviors (Johnson and Hunter 1986).

School Anti-drug Programs

These programs traditionally have involved the police only to the extent that officers have made occasional presentations or provided drug displays. Recently, however, some departments have assumed a more active role in several comprehensive school-based drug prevention programs. The DARE (Drug Abuse Resistance Education) program was jointly developed by the Los Angeles Police Department and that city's school district to have police officers provide a series of lectures for elementary and junior high students. The program focuses on peer pressure resistance techniques, self-management skills, and respect for the law. New York City has implemented a similar program, SPECDA (School Program to Educate and Control Drug Abuse), designed to teach self-awareness and strategies for resisting peer pressure to fifth and sixth graders.

The Need for a Full-Time Police Presence

In school systems where a police presence is required all day, every day, an officer's duties can vary considerably. In these schools, officers patrol school grounds, investigate criminal complaints, remove trespassers and prevent fights and disturbances – both during school and at after-school activities (Blauvelt 1990). In addition to normal police duties, school officials, parents and students expect school officers to perform such duties as

- Serving as a conduit of information among police, schools and educators;
- Attending school and student council meetings;
- Problem solving concerning the welfare of students;
- Advising students and staff on safety and security;
- Counseling students on a range of problems;
- Lecturing in classrooms on selected topics;
- Coordinating anti-truancy programs;
- Removing trespassers and other undesirables;
- Assisting and supervising after-school programs;
- Managing parking and other traffic matters; and
- Supervising school crossing guards (Harvey 1987; Office of Juvenile Justice and Delinquency Prevention 1987).

Beyond offering a trained, professional force of officers, the inclusion of local police in the school community clarifies reporting procedures, ensures necessary school security and leaves little ambiguity on issues of authority. Nonetheless, as Blauvelt (1990) notes, these are not "traditional" police functions, and many officers resent being assigned to school duties. Other disadvantages soon became apparent. For example, local officers are armed and usually in uniform; are responsible to police, rather than school authorities; may lack commitment to education or a school's educational philosophy; and often lack flexibility in dealing with delinquent acts. In addition, given competing demands on officers' time, personnel turnover on school assignments can be high while the school generally has

little input in selecting personnel. As a result, many school systems have established their own security presence.

Contracting for School Security

Blauvelt (1990) points out that contracting for school security is often schools' first response to public pressure to address actual school disruptions. Unfortunately, however, the roles of these school security guards are often poorly defined and, since lowest-cost bidding drives the contract process, personnel are sometimes inadequately screened, trained and supervised. In addition, since many students (and staff) have a general disrespect for hourly wage guards, their duties include few school activities beyond basic crime prevention patrols. Liability for guards' actions or inactions can also be quite high.

School administrators can avoid many of the weaknesses of this approach by selecting more capable security professionals. Some schools prefer retired and off-duty officers, along with college students majoring in criminal justice, because each brings experience and/or skills that are relevant to the job and setting. As Blauvelt (1990) notes, however, a good school security program can be expensive, especially if both day and night operations are included. The tradeoff for competence, it seems, is higher costs at a time when school budgets are increasingly stressed meeting even basic educational needs.

The Development of School Police

The most recent approach to criminal activities in the schools has been the development of independent police departments within many school systems. The development of these full-service police agencies is so recent that the National Alliance for Safe Schools reports that the self-controlled school police concept is only a few decades old (Rubel 1989). While much of the impetus for this movement is undoubtedly the increase in crimes and the presence of drugs on campuses, the absence of final authority by school administrators over city police assigned to school duty is almost certainly playing an important role as well.

The first such school district police agencies were created in California, where state legislation required that school security officers be fully accredited. Texas, Indiana and other states followed suit by authorizing the creation of school district police departments in their largest cities (see Law Enforcement Management Institute of Texas 1995). The trend has continued elsewhere, with many major urban school districts throughout the nation experimenting with various forms of internal police forces staffed with uniformed, armed, trained and commissioned officers. So prevalent is this trend toward school district police departments that by the end of the 1980s, over 90 percent of the members of the National Association of School Security Directors had departments with full police powers (Blauvelt 1989); over one-third were full-fledged, independent police departments (Rubel 1989).

Tasked with making schools safer places, school district officers are now both uniformed and plain-clothed and are almost always armed on duty. In addition to general safety and security issues, school officers are routinely involved in crime-prevention-related education for staff and students and will occasionally even undertake proactive investigations. In 1993, the powers of Texas school police were further expanded to permit off-campus investigations and arrests in school-related incidents. Individual Texas school districts now determine the duties and jurisdictions of their own officers – an expansion of power that has led to issues of overlapping jurisdictions and concerns about the quality of officers being employed (Law Enforcement Management Institute of Texas 1995). Still, regardless of where they are physically located or the powers of arrest they are provided, the recent focus of school policing has moved away from the simple remediation of single problems to proactive efforts to address clusters of disruptive or at-risk behaviors (Takanishi 1993). The program being examined here builds upon that approach with its focus on behaviors compromising to the academic environment.

The Trend Toward Community Policing

Unrelated to the growth of police involvement in schools (but occurring nearly simultaneously) is a national movement of police reform and development aimed at introducing versions of

what has been called "community-oriented policing." This movement, now the dominant form of police innovation, is largely a reaction to the efficiency focus of previous reforms that produced an unintended result of "stranger policing." The cumulative effect of these earlier changes served to

> reduc[e] social contact between police and citizens, and by limiting contact to emotionally charged situations in which crimes had occurred, these changes increased the likelihood that citizens and police would regard each other as strangers (Wycoff 1988).

As a result, many police officers have little understanding of the priorities and concerns of the people living or working in the areas they patrolled, causing some officers to be unaware of, and therefore unresponsive to, important neighborhood problems. In turn, this causes citizens to feel that their police neither know nor care about them.

While increased distance between the police and the public is, in itself, a serious problem, it can have important enforcement consequences as well. For example, research has shown that for crime prevention and fear reduction strategies to be effective, there must be a joint effort involving citizens and the police working toward complementary goals (Lavrakas and Herz 1982; Rosenbaum 1982; Waller 1979; Yin 1979). As such, theorists and practitioners alike are now focusing aggressively on programs that involve citizens and the police in cooperative efforts intended to resolve community problems and improve community health.

At the Core of the Concept

Although numerous varieties of community policing are now underway (see Skolnick and Bayley 1988 for an international review), certain conceptual elements appear common to all. Herman Goldstein (1990) summarized these elements: Central to all of these "community policing" programs is the broadening of the police mission to extend traditional law enforcement and order maintenance definitions of the police role and to include the idea that the police are integral to promoting the common

welfare. The police are also to become proactive in resolving community problems, according to this approach. The concern is to free the police from their traditional response-driven method of handling incidents or complaints, and to replace this method with a problem-driven and preventive approach, focusing on the underlying causal forces associated with crime and disorder.

Linked closely to this problem focus, Goldstein points out, rank-and-file police officers should be given wider latitude in decision making to facilitate responses to issues each community identifies as a concern. All of this occurs in a social environment where the police and the community are encouraged to work in closer harmony, both in defining neighborhood concerns and implementing solutions. Skolnick and Bayley (1988) describe this community-oriented approach as the "new professionalism," based on the notion that police should serve, learn from and be accountable to the community - that "the police and the public are co-producers of crime prevention."

If community partnerships are to be at the core of policing, then building and maintaining mutual trust must be an important element. While the police have traditionally encouraged community members to come forward with relevant information - to be the "eyes and ears" of the police - community policing is intended to be fundamentally different. Where special units interacted with the community before, the effort now is for the police to become an integral part of each community's culture while residents (and other community members) assist in defining police priorities and applying police resources. As they do, activities that contribute to the orderliness and well-being of a neighborhood can become as important as the more basic crime fighting concerns of traditional police interest.

Even so, the goal of community policing is not simple public relations - as many have often mistakenly declared. Far from it, the trust that is built between the police and community enables the police to gain greater access to important information that will help solve and prevent crimes. As such, arresting

offenders, reducing incivilities and encouraging public use of public spaces are all complementary goals in creating and maintaining safe and secure communities.

Ownership of Problems: Core Issues in Community Policing

To illustrate the community-oriented process in action, Chris Braiden (1992), a former Canadian police official, tells of a bicycle that he noticed chained to a post near his police headquarters in Edmonton, Alberta. For months throughout the winter he watched this bike as a variety of the city's best officers walked by it going to and from their duties. Although it was obviously stolen or abandoned, no one took steps to retrieve the bike so that it could be returned to its owner. In the end, he concluded, this was so because the problem, and the neighborhood around it, were largely anonymous – neither belonged to any officer individually.

From this example, Braiden goes on to suggest that many of us are disconnected from the world around us because of a lack of ownership of our environments. Since people are motivated by self-interest, a sense of commonwealth is especially difficult to create in most communities today. Just as a ten-year-old boy loses interest in the house beyond his own room, the rest of us often isolate ourselves from the neighborhoods beyond our own homes. Unfortunately, when people have little need for their community, they are seldom able or interested in contributing to it. Only when that need can be established, Braiden suggests, will most of us begin to focus beyond our own backyards.

What Constitutes Community?

Among the more vexing problems for advocates of community-based policing has been the development of a consensus on the meaning of the basic concepts. Historically, for example, sociologists have defined a community as "any area in which people share common interests" (Trojanowicz and Bucqueroux 1990:81). Far from specific, however, a broad definition has

been used to include both small, rural villages and major portions of larger urban areas. Others, therefore, have tried to narrow the meaning by relying on central identifiers (such as churches, schools, etc.) so that community boundaries can be drawn around all who rely on such services. By the late 1950s, the term was simplified to include people "in social interaction within a geographic area" with one or more additional ties. It was just these interactions, community organizers contended, that shaped peoples' identities and values. "People do not make a conscious decision to take on the colorations and nuances of their communities," Trojanowicz and Bucqueroux (1990) offered, "... but instead this occurs as a natural outgrowth of living in the community and bumping up against the behaviors and attitudes of other community members in the routine course of daily life."

With the focus of community on member interactions, it is easy to see how the community and neighborhood concepts have often become confused. Important differences do exist, however, since neighborhoods are usually defined by physical boundaries (streets, parks, rivers, etc.) that distinguish an area and its inhabitants. Within these boundaries, social traditions may vary in specific ways from the larger community - variations that reinforce behaviors and lead to a unity among those involved. It is this unity that brings the sense of ownership that Braiden (1992) has described.

Duffee (1997) adds that the issue of community size, or the location of community boundaries, is a conceptually difficult problem for the police. The level most often chosen, he notes, is the residential neighborhood, often unique entities that many cities have invested heavily in identifying so that services can be centered around them. While such distinctions are logical in most policing contexts, clearly other physical entities with distinctive social traditions exist. Examples include public housing units, some large commercial properties, and, of course, the public high school in Charlotte, North Carolina that is the focus of the study discussed below.

Adding a Problem-Oriented Approach

Many who have adopted community inclusion as a policing strategy are equally eager to embrace the problem-solving method, or tactic, first proposed by Goldstein (1979) as the preferred means of policing for the future. As applied by the police, a problem-solving approach is based on the assumption that "crime and disorder can be reduced in small geographic areas by carefully studying the characteristics of problems in the area, and then applying the appropriate resources" (Eck and Spelman 1987). The essence of the police problem-solving process is actually quite simple:

> Underlying conditions create problems. These conditions might include the characteristics of the people involved (offenders, potential victims, and others), the social setting in which these people interact, the physical environments, and the way the public deals with these conditions.
>
> A problem created by these conditions may generate one or more incidents. These incidents, while stemming from a common source, may appear to be different. For example, social and physical conditions in a deteriorated apartment complex may generate burglaries, acts of vandalism, intimidation of pedestrians by rowdy teenagers, and other incidents. These incidents, some of which come to police attention, are symptoms of the problems. The incidents will continue so long as the problem that creates them persists (Eck and Spelman 1987).

Obviously, if the police are to have a significant impact on crime, assistance from the community members with the most in-depth knowledge of the problem area is usually essential. Such cooperation, however, must usually extend beyond the basic causes of a problem to include the selection and prioritization of the problems themselves. In other words, in addition to the serious crime problems traditionally identified by the police, a recognition of and attention to a variety of other community concerns may be equally important. For example, while

the police may regard robberies as their biggest problem in a neighborhood, its residents may instead find derelicts sleeping in doorways, picking through garbage and harrassing passersby as their most important concern. Not only will cooperative attention on both problems reinforce trust and facilitate results, the process itself becomes self-renewing as other areas deserving the mutual attention of the police and the community become apparent (Community Policing Consortium 1994). Though the goal often goes unrecognized, as the focus is fixed on "quality of life" concerns, the overriding purpose of the problem-focused approach is to reduce crime, fear and disorder in target neighborhoods. Now widely popular, variations on the problem-oriented policing theme have been tried in locales as diverse as Madison, Wisconsin (Goldstein and Susmilch 1982), Baltimore County, Maryland (Cordner 1985; Webster et al. 1989), and Newport News, Virginia (Eck and Spelman 1987), where project evaluators each found their programs to be successful. In each case, those involved noted that specific community concerns were addressed, overall reductions in crime occurred, or community members became less fearful as a result of the police program interventions.

Disorder and Fear: Evidence of Community Decay

Finally, in their ground-breaking article on *Broken Windows*, Wilson and Kelling (1982) first explained how perceptions of safety are often based on signs of disorder and community decay perhaps more than on the actual occurrence of crimes. While expressing fears of being victimized, many citizens cited drunks, rowdy teenagers and the homeless as often far more intimidating than are the criminals of television lore. Indeed, it is the "incivilities" (Skogan and Maxfield 1982; Lewis and Maxfield 1980) around us that often frighten us the most. "People who live engulfed by people they do not trust instinctively feel afraid," was how Trojanowicz and Bucqueroux (1990) explained it. Clearly, what is true in our communities applies equally to our schools.

Physical disorder is similarly disconcerting, so much so that community decay (abandoned cars, litter and graffiti) alone is

often interpreted as a sign of crime and danger. Wilson and Kelling (1982) noted that once the process of physical decay begins, its effects will multiply if uncorrected until the public is driven from public spaces, leaving no one to use them. In short, leaving one broken window unrepaired will invite others to be broken with abandon. When a community refurbishes an area, on the other hand, they establish expectations of public ownership – expectations that can be translated into reductions in crime and fear (see Eck and Spelman 1987; Kenney 1987 for examples from Newport News, Virginia, and the New York City subways).

The virtue of the community- and problem-oriented policing approaches, then, is that they demonstrate to people that they can take control of their communities. Once the initial efforts to target incivilities and disorder are underway, the goal is for the people most involved to take ownership and become galvanized to address specific problems.

> What we must also remember is that fear of crime in many urban areas is a mirror held up to the overheated climate of violence that so many young people grow up in, thinking that what they see is the way the world has to be. As a society, we must find ways to provide these young people at least a glimmer of what a better life would be like (Trojanowicz and Bucqueroux 1990:159).

Policing the School Community

In few other institutions is the need for a community or problem-oriented approach greater than in our public schools. As Vestermark (1971) points out

> In the high school, the police officer's role is similar to that of an American military advisor overseas. His presence may be unwelcome, his advice only grudgingly heard. When needed to respond to a serious fight, for example, he may insist on resolving it in ways that are contrary to the principal's wishes.

Rubel (1989) makes a similar point

> In a phrase, police on school grounds often present

> something of a mixed blessing; while they are undoubtedly capable of resolving crises, their presence may have the unintended consequences of triggering a different kind of crisis even while resolving the first one. Police on campus can be provocative.

Vestermark's and Rubel's concerns can only be addressed by involving students, teachers and other stakeholders in every phase of problem solving. Recognizing the seriousness of crime and disorder on their high school campuses, but mindful of the problems and concerns encountered in school policing, the Charlotte-Mecklenburg School District and the Police Department undertook an innovative experiment in school safety based on these community-oriented concepts (Kenney and Watson 1992). The program and its evaluation are described in the chapters that follow.

3 THE CHARLOTTE SCHOOL SAFETY PROGRAM

Responsible for educating most of the youth of the nation's 35th largest city, the Charlotte-Mecklenburg County School District includes 109 schools, over 4,129 teachers, 9,678 employees, and over 79,798 students. Recognizing that their security needs could not be met by the police alone, by 1992 the district's administrators began introducing several programs to deal with crime-related problems, while improving students' and teachers' sense of an orderly school environment. Included in their programs were DARE and police liaison officers assigned full time to each high school. In each case, these liaison officers were specially selected volunteers from the Charlotte Police Department who were trained, armed and had full police powers. These officers provided on-campus patrol and general security, met with students on an informal basis and were available to faculty and staff to assist with problems as they were identified. Although school administrators provided some oversight of officer activities, each officer remained a part of the police department's organizational and supervisory structure.

Crime in the Charlotte Schools

Table 3.1 indicates the number and types of calls the Charlotte Police Department received from Charlotte's eight high schools in 1993 - the year before the School Safety Program. As the table indicates, a total of 1,409 calls were received from these eight facilities.

In addition to their on-campus liaison activities, the Charlotte police provided a wide range of school service and order maintenance activities. This finding is compatible with re-

search on more traditional police that has consistently found that law enforcement or crime-related activities consume less than one-third of police assignments (Greene and Klockars 1991). The implications of this observation in the Charlotte schools, however, are significant for at least two important reasons:

First, with 1,409 calls for service occurring in only eight of the district's 109 schools, it would appear that the school-assigned officers handled a substantial workload. Since administrative duties - typically estimated to consume as much as 40 percent of officer time (Cordner 1990) - are not included, and since no accounting for response times between schools by liaison officers and by officers on regular duty is provided for, the workload is considerable. Fortunately, since incidents requiring police responses occur disproportionately at only a few locations, the potential for problem-oriented approaches is enhanced (Rubel and Ames 1986).

Perhaps of greater importance, however, is the diversity of service requests. As in most communities, a large portion of the calls for service involved order maintenance problems such as false alarms, disturbances, disorderly persons and fights, accidents and general assistance. Research has shown that incidents of these types contribute to people's sense of an unsafe environment (Skogan and Maxfield 1981). Fortunately, such concerns are sensitive to community action and, in fact, are the primary focus of most community- and problem-oriented approaches.

School Safety Program Design

The School Safety Program in Charlotte was designed to implement the concepts of community policing and problem solving in a high school community. From the start, the program was intended to create an environment in which students, working in cooperation with teachers, administrators and police officers, could identify and attempt to reduce crime, delinquency and disorder problems in a Charlotte public high school. The program sought to produce a number of other de-

sirable outcomes, not only for the students involved, but for the entire school. The components of the program included

- planning by police and school staff that would focus on both problem identification and solving, and the role of the police in the educational setting;

Table 3.1
Calls for Police Services from Charlotte High Schools
January 1993 to January 1994

Incident Type	Number of Calls Received	Percent of Calls Total
Service and Order Maintenance Calls		
Alarms	246	17%
Investigation (unspecified)	218	15
Accident	123	9
Warrant/Prisoner pickup	73	5
General assistance	41	3
Traffic (miscellaneous)	28	2
Suspicious person/vehicle	27	2
Bomb threat	25	2
Person with gun	8	<1
Sick/Injured person	7	<1
Missing person	5	<1
Intoxicated person	1	<1
TOTAL	802	57%
Crime-Related Calls		
Larceny	134	9%
Assaults (includes aggravated)	111	8
Disturbance/Fight	76	5
Damage to property	49	3
Vandalism	44	3
Burglary	28	2
Arson	24	2
Robbery	10	<1
Trespassing	10	<1
Disorderly conduct	10	<1
Forgery/Fraud	7	<1
Rape (includes sexual assaults)	6	<1
Vehicle theft	6	<1
Possession of drugs	1	<1
Other crimes	91	6
TOTAL	607	43%

- providing student problem-solving classes to involve students, teachers and police; and
- scheduling regular reviews by police, teachers and administrators of campus issues and student problem-solving activities.

Planning for Police and Schools

Although the on-campus presence of Charlotte police officers was both active and considerable, according to both police and school representatives, at the time of the project design no systematic effort had been undertaken to identify what officer priorities should be. As a result, some officers have experienced a sense of attempting to be all things to all people, leaving little time to focus on developing real solutions to any one issue or problem. Worse, officers elsewhere have reported that their role in the educational process has not been understood (or, perhaps, supported) by others, including teachers and administrators, with whom they must interact. The result, of course, is insufficient focus and undoubtedly a sense among many police employees of limited appreciation for what are difficult, but important, responsibilities. In response, this project began with elements of collaborative planning.

For the purposes of this project, the planning process involved a series of work meetings held over two separate three-day periods. These sessions—which included police, teachers and school administrators—were scheduled during the summer months before the 1993-94 school year. At the teaching staff's request, both working sessions were held away from school grounds so that participants would be free to present relevant issues and problems without interruption. The end result was not only a better working relationship, but a blueprint for the future that included a recognition of each participant's goals and an outline for sharing information and responsibilities.

Among the most important functions of the planning workshops was to enhance the ongoing dialogue and cooperation between the police officers and teachers in the schools to which they were assigned. While in some settings this was compli-

cated by social and professional differences, in our instance both groups quickly supported efforts to cooperatively address the concerns of the other. This process was further facilitated by focused tasks derived from regularly scheduled, though largely informal, police and teacher meetings directed at improving school safety and the educational environment.

Each police-teacher meeting included a focus on safety issues of concern. This included not only the physical security issues such as parking lot security and eliminating weapons on campus, but the quality of campus life issues as well. The result, of course, was an atmosphere of cooperation that facilitated the identification of not only security issues and behaviorally troubled youths, but also potential remedies and responses to each. So routine were the interactions that both police and school officials were quick to note that each was comfortable seeking the other out to exchange information, both project-related and social.

Student-Teacher-Police Problem-Solving Classes

The heart of the project required student participation in the problem-solving process. At the time of this study, eleventh grade high school students in the Charlotte-Mecklenburg County School District were required to take one year of social science studies consisting of sections in history, government and civics. In order to develop an innovative program to reduce crime and fear that incorporated a student-teacher-police partnership, the school system agreed to add a problem-solving component to the existing government and history curriculum in one target high school in the city. These classes incorporated a problem-solving curriculum that required a minimum of one to two days a week be devoted to student-teacher-police efforts to identify and solve school problems, especially those involving school safety. While the research staff assisted with the curriculum design, the process itself was largely driven by teaching staff because they were most familiar with the problems confronted by students and the range of available responses. In addition, project staff stressed teacher involvement because the

responsibility for implementing and conducting the responses would naturally fall to teachers.

The classes were designed so that students, teachers and police could share responsibility for identifying the crime, drug and disorder problems and concerns on campus. As the process continued, we observed that it was the students who increasingly carried the responsibility—a responsibility that many students told us had been more interesting than they had imagined it might be. As facilitators, the teachers provided materials and resources, offering overt guidance only when absolutely necessary. As a part of the regular classroom process, teachers also assigned out-of-class work, supervised evaluations of problem solutions and assessed student input to the proposed solutions. Student grades for the course were partly determined by these tasks. For his or her part, the assigned officer regularly attended classes and participated as requested. While police-student relations appeared strong, we were surprised at how little police involvement was actually requested or required.

Between 15 to 30 eleventh grade students were assigned to each participating social science class, allowing more than 250 students to participate during the project year. Eleventh graders were chosen for participation rather than sophomores or seniors in order to optimize both the students having a vested interest in their school's future, and a knowledge of its past. Each participating student was graded and received credit, as they would for any other subject. Finally, the curriculum itself, which was developed specifically for this project, consisted of:

- instructional and supporting material to be presented as needed;
- discussion and exchange periods among the students, with police included when appropriate;
- the development and use of a formalized process of school problem identification;
- the application of a formalized process to generate problem solutions based on concerns discussed in class;
- the implementation by all class participants of the solutions generated; and

- a process of evaluation to measure the effect of problem interventions.

The Process

The overriding goal of this problem-solving program was to attack specific crime, order and fear-related problems using the resources of the school, students, faculty and police. As noted earlier, the approach actually builds upon at least a decade of development in other settings where problems as diverse as gangs (Bureau of Justice Assistance 1997), drugs (Eck 1992), and the management of police calls for service (Sherman 1987) in urban, suburban and even rural communities (Diamond 1993) have been addressed with apparent success. The general design of this four-stage problem-solving process is as follows.

Problem Identification (Scanning). The problem-solving process is quite straightforward and easily applied in a structured classroom setting. During the initial scanning or problem identification stage, the group participants identify and discuss various school issues - determining which are to be considered problems appropriate for further work. Issues of interest might be as diverse as vandalism, drugs and their availability, physical attacks in restrooms, or the lighting or general accessibility of campus facilities.

Certainly, the process of structuring the student problem-solving group is an important component influencing group cohesiveness and effectiveness (Bednar and Kaul 1978; Corder et al. 1980). Here, the amount of structure needed is decided by the group leader (i.e., teacher). Generally, less structure is required if the group is judged to be interpersonally skilled (Bednar and Kaul 1978), while more structure is needed if the group lacks sophisticated interpersonal skills. Structuring should be done within the group, with the group deciding on guidelines for acceptable behavior before beginning the actual problem-solving process. This allows group members to feel ownership of the guidelines governing their behavior.

Prior to beginning problem solving, group leaders should outline the group's purpose and function. This helps group

members to orient their behavior to solving school-related problems while decreasing the probability of non-task-related behaviors. Of course, participating teachers should also develop group leadership skills, methods of giving appropriate feedback and understanding of problem-solving behaviors.

The degree of support that each group receives also weighs heavily in determining success. Ideally, support from the administration, school board, parents, teachers, community groups, and police should be assured and emphasized during the initial group (class) meeting by representatives from each of these constituencies. At that time, the police officers who are to participate should introduce themselves so that their role as group members can be explained.

During the scanning phase, group members are responsible for collecting information about perceived problems in the school environment. Their own knowledge, along with official records and interviews with teachers, administrators, parents, students and police may be useful. Members can then present their findings to the group, who will decide which problems require further consideration and how they should be prioritized. Problems that are chosen for further investigation should then be more clearly defined so that there is little ambiguity with respect to the defined problem.

Obviously, the scanning or problem identification stage is the most critical step in solving problems (Bergan and Tombari 1976; Hollister and Miller 1977; Lazarus 1976). It is here that a clear goal statement for each problem of focus is developed to assist the problem-solving group in later stages of the process.

Analysis. In the analysis stage, the group sets out to collect more detailed information about the identified problems. As Eck and Spelman (1987) describe the process, "the goal is to understand the scope, nature, and causes of the problem." Sources of information available should include not only official school and police records, but also interviews, surveys, presentations and outside opinions. Obviously, the heart of the process involves a careful and in-depth analysis of the factors that are contributing to the identified problem(s).

The analysis stage consists of four steps: 1) analyze the forces impinging on the problem; 2) brainstorm a range of strategies; 3) evaluate the strategy alternatives; and 4) specify the responsibilities of group members for each. Clearly, the analysis step is where most of the decisions are made regarding action. In addition, during this stage of the process it is important that realistic goals be established for subsequent efforts. Using Goldstein's (1990) original model, a range of solution goals may include

- total elimination of the problem,
- substantially reducing the problem,
- reducing the harm(s) created by the problem, or
- devising better methods of dealing with the problem.

Strategy Formulation. The response stage has three objectives: 1) develop a set of response options that are consistent with the information gathered; 2) select a response or responses; 3) and implement it or them. Students may call upon police resources, student and parental involvement (such as cleanup, repair and peer support campaigns), faculty or administrative action or assistance from outside sources. In short, instead of relying upon traditional responses alone, anyone who can help should be invited to do so. In each case, response options should be wide-ranging - no approach should be overlooked. A few possible response options might be to:

- Concentrate attention on those accounting for a disproportionate share of the problem. A relatively small number of individuals usually account for a disproportionate share of practically any problem, either by causing it, facilitating it or suffering from it.
- Convey accurate information. Though one of the least used responses, it may be among the most effective options available. Conveying information can (1) reduce anxiety and fear; (2) enable those impacted to solve their own problems; (3) elicit conformity with rules not known or understood; (4) warn others about vulnerability and suggest protective steps; (5) demonstrate to others how they unwittingly contribute to problems; (6)

develop support for solutions; and (7) acquaint all involved with outcomes they can realistically expect.

- Alter the physical environment to reduce opportunities for a problem to recur.
- Alter or increase rules and policies that address conditions that contribute to a problem (Goldstein 1990).

Regardless of the response option selected, it is important to guide the problem-solving group toward manageable goals. Psychologist Karl Weick (1984), who has studied problem solving, points out that as people begin to look at social problems, they often do so on a massive scale. For example, they may look at eliminating all unemployment, homelessness or crime. In doing so, they define these problems in such a way that they overpower all possible solutions that might be employed. The problem-solvers then experience frustration, dashed excitement and helplessness.

A more effective response, Weick argues, is to take large problems and break them into smaller ones. When done, a series of controllable problems of modest size are presented to allow problem-solvers to develop specific responses that can succeed. These smaller wins may seem less important individually; however, taken together they set an example that attracts support while reducing resistance to future efforts.

Finally, all response ideas - large and small - should be carefully documented, including 1) the problem(s) to be addressed; 2) the methods used to identify and understand it; 3) the methods chosen to alleviate it; 4) the respective roles of participants in implementing the solutions selected; and 5) the outcomes determined during the process evaluation.

Evaluation. Finally, during the assessment or plan evaluation stage, the participants should again collect data and evaluate the effectiveness of their responses. Group members can compare the data regarding the problem prior to and during intervention. Based on this evaluative review, the group can decide if its plan is working (based on the goal statement made during scanning) and make plans to solve other problems. If the plan is

ineffective, the group should recycle through the problem-solving steps, beginning with scanning, to determine if the problem was identified correctly (Eck and Spelman 1987:104).

Conceptualizing the Student Problem-Solving Process. Usually, when people conceptualize the four-stage problem-solving model, they picture it in a straight line, going from the first step to the second, and so on. In fact, however, students involved in the process will frequently move back and forth among the stages with teachers coaching them to the appropriate point – even when that means moving backward. For example, analysis may reveal that the problem identified is not, in fact, the main issue. When having difficulties developing appropriate responses, students may need to reanalyze their problem's causes. Further, where assessment reveals no change in the problem, the response may have been implemented improperly or the analysis on which the response is built may have been insufficient. In each of these cases, the student problem solvers may need to repeat one or more stages in their entirety. This reworking of the model does not suggest failure, rather it is a normal part of the process and will make for more successful projects.

In addition, students should be reminded that problems come in all shapes and sizes. Included are:

- Simple problems requiring a single student working alone or with others from the school.
- Moderate problems involving small groups or teams of students. As the problem grows in magnitude, more students, school staff or resources may be needed.
- Complex problems requiring the collaboration of many members of the school community. Where problems are large or widespread, or affect the entire school, a schoolwide collaboration and use of outside resources may be warranted. Here, students may need to involve the principal or school administration.

The important point to remember is that small problems should be addressed in addition to the larger, more visible

ones. Small problems can build over time and affect the quality of school life just as large problems do. Indeed, by addressing them early, many small problems may not have the time to develop into complex ones.

Finally, as they conduct their analyses and develop responses, students should be reminded to expand their focus to include all sides of the problem triangle. While most problems have offenders (the people who cause the problem), equally important are the victims and locations where the problems occur. And although it is usually more satisfying to address a problem's cause, to reduce future incidents, victims and locations should be targeted as well.

Police and Teacher Process Reviews

At the close of each semester, project staff met with police, teachers and students from each class to review the classes themselves, the problems and issues identified, solutions proposed, implementation issues and, of course, the success of the process. These sessions were held in structured focus groups where participants were asked to recall the things that worked, as well as those elements that did not. Project staff conducted the process and documented the findings. The data from these sessions assisted the research process and provided meaningful input for making adjustments in the program. Since these discussions provided much of the basis for a process evaluation, their results will be important for project replication.

Why Should the Program Work?

As we envision it, there are two purposes of the school-based problem-solving groups:

1. to change attitudes and/or behaviors of group members; and
2. to form the group into a change agent that has the skills and knowledge to effect the desired change.

If successful, this guided group process should result not only in reductions in school crime and disorder, but should improve the overall school climate as well. As the students accept responsibility for their school environment, their attitudes to-

ward the police, their peers, the fairness and clarity of school and social rules, their own abilities to influence change and even school itself should improve (Smith 1989). While we anticipate these improvements among students generally, recent research suggests that they may be most pronounced among minorities and youths who have traditionally invested least in the educational process. Before continuing, however, a brief review of the theoretical foundation for student empowerment in the problem-solving process is important.

Cultural Conflict and Transmission

In explaining why so many youths violate our rules of social behavior, early theoreticians (Miller 1958; Shaw and McKay 1942) suggested that a unique, independent value system emanating from lower-economic slum areas of major cities was to blame. Different from and in conflict with middle-class values, the traditions of this criminally oriented system are then passed along from generation to generation in a process of cultural transmission. While no ethnic or racial correlation with criminal behavior is offered, most observers are quick to point out that the occupants of lower-class urban environments are primarily drawn from only a few ethnic or racial backgrounds.

Expanding on the cultural model, Sutherland and Cressey (1960) also argued that deviant behaviors are learned in a process of personal interactions that result in differential associations. Although in their writings the skills and rationalizations for crime are no longer restricted to city slums, an excess of definitions favorable to deviance are nonetheless passed along between members of intimate groups. Indeed, people – especially young people are especially vulnerable to learned misbehavior when they live in areas where considerable examples of deviance exist, successful role models pursuing these activities are available, intimate personal contact between youths and their deviant role models occur regularly, and a prevailing atmosphere of contempt of and disregard for social rules exist.

Criminologist Thorsten Sellin (1938) first offered a theory of culture conflict and crime. Since different cultures have differ-

ing beliefs and values, clashes are inevitable as more unique groups (teenagers) come into contact with the larger society. Sykes and Matza (1957) went further to argue that within our culture, two sets of traditions—conventional and deviant—are held simultaneously by almost everyone. While some groups are influenced more by one or the other, these authors note that cheating and other unethical means have well established places in the American dream of financial and social success.

Finally, Merton (1957) described the strain that results between the socially acceptable goals of success and the approved means of reaching it. Since opportunity is often shaped by forces beyond an individual's influence, the response is often the creation of extra-legal solutions to the problem of goal attainment. The "cardinal American virtue, ambition," Merton wrote, "promotes a cardinal American vice, deviant behavior" (1957:146).

While each approach offers some intuitive appeal, deviance in a high school setting is seldom confined to a single student subgroup. Still, it is reasonable to argue that many teenagers' goals and values are different than those of the larger society, leaving them the basic choice of which—but not both—sets of rules to follow. As the actions of their peers before them are told and retold, similar behaviors are passed on until students that follow become deviant precisely because they follow the rules and examples of their subgroup. Where gangs are involved, these explanations may be most applicable.

Deviance as a Matter of Self-Control

Where the sociological theories assume that people are generally "good" unless driven "bad," those favoring control-based explanations take a more neutral stance. For example, Wilson and Herrnstein (1985) take a purely rational choice view that balances gains against losses.

> The consequences of committing the crime consist of rewards and punishments; the consequences of not committing the crime also entail gains and losses. The larger the ratio of the net rewards of crime to the net rewards of noncrime, the greater the tendency to commit the

> crime. The net rewards of crime include, obviously, the likely material gains from the crime, but they also include intangible benefits, such as obtaining emotional or sexual gratification, receiving the approval of peers, satisfying an old score against an enemy, or enhancing one's sense of justice. One must deduct from these rewards of crime any losses that accrue immediately – that are, so to speak, contemporaneous with the crime. They include the pangs of conscience, the disapproval of onlookers, and the retaliation of the victim (p. 44).

Since the benefits of crime are usually more immediate--while the rewards of noncrime lie more in the future – Wilson might argue that why so many of us are deviant may be less important than why the rest of us are not.

In responding to a similar question, Walter Reckless (1961) offered an outline of behavior that focused on a person's inner and outer "containments." From the inner containment come most self components (such as self-control) that result from successful family influences. It is the outer containment, however, that "represents the structural buffer in the person's immediate social world which is able to hold him within bounds" (p. 44). Of course, when the family fails, it becomes the role of the community, the police, the schools and the other formal agencies of outer containment to exert their controlling influence (Hagan 1985). Conversely, as Durkheim (as cited in Hirschi 1969) explained:

> The more weakened the groups to which [the individual] belongs, the less he depends on them, the more he consequently depends only on himself and recognizes no other rules of conduct than what are founded on his private interests.

The Role of the Social Bond

If it is the social bond that limits deviance, then it is important to understand what constitutes that bond. As he developed his control theory of *The Causes of Delinquency*, Travis Hirschi (1969) began with a classification and description of the ele-

ments of the bond to conventional society. In all, he suggests, there are four primary elements - attachment, commitment, involvement and belief - that are related to each other. Using survey data from junior and senior high school students, he concludes that as these bonds grow stronger, the likelihood of delinquency is diminished. Conversely, however, he adds that weakness in any of these bonds can be associated with delinquent behavior.

Attachment. It is this element that arouses a sensitivity to the wishes and expectations of others. To be attached to others is to be concerned about their feelings. As such, most of us will seek to protect those we are attached to from the hurt, loss and embarrassment that unregulated behavior can produce. While attachment to peers is, of course, important, according to Hirschi the bond to parents and school matter most. Adler et al. (1991:161) explain the link between school and delinquency through the following chain of events:

> [A]cademic incompetence leads to poor school performance; poor school performance results in a dislike of school, which leads to a rejection of the teachers and administrators as authorities. The result is delinquent acts. Thus attachment to school depends on one's appreciation for the institution, one's perception of how he or she is received by teachers and peers, and how well one does in class.

Commitment. As defined by Hirschi, commitment refers to the time and energy a person invests in any personal goal of importance. Examples might include education, business success or building a good reputation. For society to function smoothly, most members must find that through the normal act of living they have acquired goods, reputations or prospects that they do not wish to carelessly lose. As each person becomes committed to these conventional lines of action, social order and individual commitment to conformity is increased. In other words, as Hagan (1985:165) explains, "it is not so much

that most of us want to be honest, but that we fear the costs of being dishonest."

Involvement. Hirschi notes that for most of us, time and energy are inherently limited. So much so, in fact, that many who live lives of virtue do so primarily because they lack the time to do otherwise. Involvement in conventional activities is, therefore, an important part of social control. It is this line of reasoning that is largely responsible for the emphasis on recreational activities found in many delinquency programs.

Belief. The last of the bonds differs from the cultural deviance theories since it assumes the existence of a common value system within the society or group of interest. In fact, where a person is commited to a value system different from the society around them, there is little to explain. The question Hirschi poses asks why a person might violate rules he or she believes in. It is not, he says, why different people might differ in their beliefs about what constitutes good and desirable conduct. From that, he concludes that "if young people no longer believe that the laws are fair, their bond to society weakens, and the probability that they will commit delinquent acts increases" (Adler et al. 1991).

Putting Delinquency Theory Into Practice

Recently, the Office of Educational Research and Improvement (Eagle 1988) reported that 15 to 30 percent of adolescents drop out of school before completing a high school education. Typically, ethnic minorities drop out at a rate higher than whites, with studies indicating that in some urban areas as many as 40 to 60 percent of black adolescents drop out before completing their educations (Reed 1988). While many factors have been offered to explain this disparity in outcome, considerable recent evidence exists to suggest that minority students simply experience school in ways that are qualitatively different than many of their white peers (Cernkovich and Giordano 1992). In short, the process of "school bonding" appears to be far weaker

among minority adolescents who find themselves dealing not only with the normal difficulties of learning, but with reduced expectations, unequal opportunities and less supportive environments as well. The critical question, then, may not be why so many minority youths drop out of school, but rather, given the problems they often confront, why so many choose to stay in school and succeed (DeParle 1991). By empowering them within their own environments, we believe, and the related theory and research suggest, that the school attachment and commitment of students – both white and minority – will increase significantly (see Checkoway 1993; Gottfredson 1986; and Koba 1993 for examples of related efforts). As students' investment in the school environment increases, school performance should be impacted as well.

One final observation comes from Kazdin (1993) and Takanishi (1993) who examined why so many school programs are ineffective. Each makes similar observations:

- Although providing information and education are necessary components of a prevention program, they are seldom sufficient to induce changes in behavior.
- Staff and teachers expected to carry out most programs are often inadequately prepared for the task.
- Few programs are carried out with a high degree of integrity.
- Program duration is usually too brief.
- Inadequate support from administrators, parents and community leaders is offered.

Each of these shortcomings was addressed by this project's design.

4 EVALUATING THE IMPACT: THE RESEARCH DESIGN

The project's evaluation was designed to collect measures of project effect on the students and teachers as well as to assess the impact on the school district police and West Mecklenburg High School, the project's experimental school. Specific changes were expected in the actual rates of crime and violence; in the levels of fear among students, teachers and staff; and in the overall attitudes of the school's participants. The following discussion focuses not only on the more obvious impacts regarding employment satisfaction and the school and educational environment but more subtle effects on student performance and their willingness to accept responsibility for their own "community."

To identify these impacts, we chose a quasi-experimental research design using measures collected in three survey waves. In selecting this approach, we agreed with Campbell and Stanley (1963:2) who asserted that

> the experiment: [is] the only means for settling disputes regarding educational practice, [is] the only way of verifying educational improvements, and [is] the only way of establishing a cumulative tradition in which improvements can be introduced without the danger of a faddish discard of old wisdom in favor of inferior novelties.

In our project, impact data were collected from more than 450 students attending both West Mecklenburg and Garinger High School, the control school. In each setting, the project's participants were the population of eleventh grade students who attended each school's mandatory class in social sciences during the 1994-95 school year. The evaluation results allowed for comparisons both among individual participants and at the school-wide level.

Conducting a Quasi-Experiment

Once the police department and the Charlotte-Mecklenburg School District agreed upon the terms of participation, two matched high schools were selected to participate in the research program – one as a test site, one as a control. These schools were chosen because they most closely matched on relevant variables, including

1. student performance, including previous year grades, median grade point averages, Preliminary Scholastic Aptitude Tests (PSAT) and student plans for higher education
2. student participation and discipline, including attendance and absenteeism, retentions in grade, suspensions and numbers of students expelled from school during the previous year;
3. student demographics, including race, gender, percent with disabilities, percent gifted and talented and number eligible for free or reduced price lunch; and
4. teacher characteristics, including percent of staff assigned to teaching, teacher experience and education level of teaching staff.

After reviewing the available data, West Mecklenburg High School was selected to serve as the experimental site, with Garinger High School as a control school. (Site selection is described more fully in the following section.) Following lengthy discussion with school administrators and appropriate faculty, staff at West Mecklenburg High agreed to implement the School Safety Program, including the problem-solving classes. For its part, the police department agreed both to participate in the experimental classes through the police-school liaison officer and to commit additional officers to the experimental school as needed for problem-solving strategies. Meanwhile, Garinger High also agreed to be the control school, which meant participating in the project's data collection while receiving only the existing levels of police services—one officer assigned to campus with no specific duties or tasks. To measure the outcomes of the program, research staff conducted both process and outcome evaluations.

According to the design, the project actually began at the end of the 1993-94 school year (May) as the participating students completed their tenth-grade school year. At that time, project staff examined official police and school records and demographic data and developed the design and schedules for the curriculum development for the problem-solving classes. The initial administration (pretest) of the *Effective School Battery* (ESB), the primary source of project data, was also administered to both students and teachers at that time. By year's end, the initial police-teacher planning and review sessions were held as well. The remaining planning and curriculum development sessions were held during the summer months before the start of the new school year.

The actual experimental treatments were introduced as the 1994-95 school year began. As the project progressed, project staff made regular visits to both schools, paying particular attention to the introduction and operation of the problem-solving classes. The second and third waves of data collection followed at approximately five-month intervals to coincide with the completion of the school year's two semesters. During each wave, data were collected from both schools, all teachers and all participating (Eleventh grade social science class) students. From the students, all data were gathered on a single day as a regular part of class in their regularly assigned classrooms. Data collection at Garinger High School of staff and teachers was scheduled for completion as they attended their once weekly after-school faculty meeting. Since West Mecklenburg High School's faculty meeting schedule was less flexible, staff and teachers self-administered their data instruments during the school day and returned their responses in sealed envelopes to the head of the school's history and social science department. The actual project design is presented in figure 4.1.

Selecting the Experimental Sites

The selection of research sites was initially constrained by the project setting. First, while the Charlotte-Mecklenburg School District includes schools in both city and county jurisdictions,

FIGURE 4.1
Project Design

EXPERIMENTAL SCHOOL	CONTROL SCHOOL
Examine school conditions: -- reported crime and discipline action -- absenteeism -- grades	Examine school conditions: -- reported crime and discipline action -- absenteeism -- grades
PRETEST	**PRETEST**
Administer *Effective School Battery*	Administer *Effective School Battery*
Measure: -- fear of crime -- victimization -- delinquency/peer associations (self-reported) -- attitudes about school/authority	Measure: -- fear of crime -- victimization -- delinquency/peer associations (self-reported) -- attitudes about school/authority
EXPERIMENTAL CONDITION:	
(First Semester Research Measurements)	
Administer *Effective School Battery*	Administer *Effective School Battery*
Measure: -- fear of crime -- victimization -- delinquency/peer associations (self-reported) -- attitudes about school/authority	Measure: -- fear of crime -- victimization -- delinquency/peer associations (self-reported) -- attitudes about school/authority
Examine school conditions: -- reported crime and discipline action -- absenteeism -- grades	Examine school conditions: -- reported crime and discipline action -- absenteeism -- grades
(Second Semester Research Measurements)	
Administer *Effective School Battery*	Administer *Effective School Battery*
Measure: -- fear of crime -- delinquency/peer associations (self-reported) -- attitudes about school/authority	Measure: -- fear of crime -- delinquency/peer associations (self-reported) -- attitudes about school/authority
Examine school conditions: -- reported crime and discipline action -- absenteeism -- grades	Examine school conditions: -- reported crime and discipline action -- absenteeism -- grades

only the city police had agreed to the required classroom participation. This, and the need for comparable police data from both participating schools, narrowed our choices to only those high schools within the Charlotte city limits as it existed at that time. The subsequent merger of the county and city police less than one year later would have made this choice unnecessary.

Equally important, we recognized the imposition that project participation would bring to each school, both experimental and control. In the experimental school, teachers had to rewrite curricula and try new approaches to teaching, with most of the development work occurring out of class and during the summer months on teachers' and staff members' own time. The control school, meanwhile, had to agree to data collection disruptions knowing that results could not be shared until the project's end at least one year later. Since few agencies or organizations would accept evaluation under such terms, not only was individual commitment necessary, great organizational courage would be required as well. With that in mind, the police department and school district staffs narrowed the choices to eight schools and included recommendations about those most likely to be well matched.

Next, research staff collected school wide data from each of the candidate schools. Each year, Charlotte-Mecklenburg schools provide the system's central administration with a year-end *Report Card* that summarizes specific information concerning student performance. Variables such as grades and testing results, as well as attendance, suspensions and other disciplinary actions, are reported. After combining this with police department data, research and school board staff selected the most closely matched schools.

In selecting the West Mecklenburg and Garinger High Schools, project staff found comparability on several key points, including student demographics. While the junior class at West Mecklenburg High is somewhat smaller than that at Garinger, the ethnic composition, gender and percentage of students who are either handicapped or gifted and talented are similar in comparison to the other available school combinations. As ta-

Table 4.1
West Mecklenburg and Garinger High School Students
Demographic Comparisons – March 1992

Student Demographics	West Meck. High	Garinger High
Total Students	1144	1338
Percent male	51	49
Percent handicapped	5	7
gifted/talented	11	11
Percent white	57	45
black	41	50
Percent eligible for free/reduced lunch	17	11

ble 4.1 shows, however, a larger proportion of West Mecklenburg's students are eligible for free or reduced price lunches, suggesting that the students attending that school are economically less well off than their peers at Garinger. While economic comparisons among students at West Charlotte, South Mecklenburg and West Mecklenburg High, as well as those at Garinger and Myers Park High Schools, were more similar, those schools were poorly matched in most other regards. Similarly, while Myers Park and West Mecklenburg students were ethnically most comparable, their academic performance and disciplinary status varied significantly. Table 4.2 compares the performance of West Mecklenburg and Garinger High students.

As for the teaching and administrative staffs, West Mecklenburg and Garinger High Schools continued to be the most comparable among the options available. As expected, given the size of its student body, the Garinger faculty was nearly 19 percent larger than that found at West Mecklenburg High. Even so, when examined more closely, staff assignments, qualifications and experience were each found to be quite similar. While the percentage of staff assigned to classroom teaching

Table 4.2
West Mecklenburg and Garinger High School Students
Academic and Disciplinary Comparisons – March 1992

	West Meck. High	Garinger High
Academic Performance		
Grades A	17%	17%
B	27	23
C	27	25
D	20	21
F	10	14
Median GPA (unweighted)	2.4	2.1
PSAT Results		
Verbal	30.6	28.9
Math	35.0	32.7
Plans for Higher Education		
Attend two-year college	44%	36%
Attend four-year college	42	48
Military	4	5
Other plans	10	11
Disciplinary Status		
Average daily attendance	90%	89%
Percent absent ≥ 18 days	28%	31%
Grade retentions	22 (rate/100)	22 (rate/100)
In-school suspensions	27 (rate/100)	31 (rate/100)
Out-of-school suspensions	11 (rate/100)	9 (rate/100)
Students excluded for behavior	10	12

ranged from 65 to 73 percent, a far smaller proportion of West Charlotte High's teachers held advanced degrees or training. Teachers assigned to Providence, East Mecklenburg and Myers Park High Schools, however, were considerably more likely to have earned such degrees. Similarly, teachers at Myers Park and Harding High Schools less often had 10 years or more classroom experience while those at South Mecklenburg and East Mecklenburg had substantially more. Table 4.3 compares the staffs at the Garinger and West Mecklenburg schools.

Table 4.3
West Mecklenburg and Garinger High School
Teachers and Staff
March 1992

	West Meck. High	Garinger High
Number of Staff (full-time equivalence)	111	132
Assignments		
Percent assigned to teaching	70%	67%
Percent assigned to administration	4	4
Degrees Earned by Teaching Staff		
Bachelor's degree	58%	59%
Masters degree or higher	42	41
Teacher Experience		
0-3 years	8%	12%
4-9 years	32	31
10 years or more	60	56

Finally, perhaps the most important consideration in site selection centered around the willingness of each schools' staffs to participate in a year-long project involving considerable inconvenience to their regular activities. Here, too, we found West Mecklenburg and Garinger to be closely matched. Both schools had newly appointed administrations focused on school safety issues and improved communications between staff and students. Each had strong social science programs with independent department heads. In addition, the teaching staffs in both schools were willing to experiment and try new methods and seemed interested in the project and its goals. As a result, these two schools were selected as project sites, with West Mecklenburg High designated the experimental school and Garinger as the control. As agreed, while the staff and students at Garinger would participate in each wave of data collection, no results would be provided until the project's completion since any actions taken in response to the information gathered would invalidate the school's role as a comparison.

Hypotheses of Success

With the research sites selected, police and school staff began the initial planning sessions to design the project's problem-solving classes. As these began, the project's process evaluation began as well.

Unfortunately, not even the creation of "good ideas" will guarantee an effective program (Pressman and Wildavsky 1973; Berman and McLaughlin 1978). Before success can be realized, the critical stage of implementation must occur so that program ideas can be translated into specific activities. Programs imply the development of resources, personnel, activities and commitment to those activities. As such, the goal of the process evaluation is to determine whether the project's services were provided in the manner specified by the project plan. Careful process monitoring is necessary before impact evaluation data can be correctly interpreted. It is the knowledge of the intervention process that provides participants with useful information regarding what did or did not work. In addition, since social science programs often take place in complex settings and then are replicated in other environments, researchers must describe the implementation process, as well as the program's operation over time.

As such, as the project's process evaluation began, project staff paid particular attention to five primary implementation components:

- A description of the process by which the program elements were created and implemented, including 1) the training for both teachers and officers; 2) the degree of participation and interaction during planning sessions; 3) interactions and levels of participation during workgroups, curriculum design sessions and training; and 4) the level of receptivity and responsiveness of the students involved.
- A description of the school and classroom environment into which program elements were introduced.
- The measurement of the program's continuous operation over time, including: 1) the numbers of partici-

pants in the project's workgroups; 2) the numbers and types of problems identified by the problem-solving groups; 3) the numbers and types of potential solutions identified by the problem-solving groups; 4) the occurrence of police-teacher planning sessions and process review meetings; and 5) the levels of attendance and interaction at problem-solving classes, compared to routine classes.

- The identification of intervening events that may have impacted imple-mentation and program outcomes.
- The identification of unintended program consequences.

Beyond the process evaluation is the equally important issue of whether the intervention caused the intended impact. This impact evaluation is based on actual measures of project effect on both the individual participants and the environment in which the project occurs. In our case, this includes the effect on not only the West Mecklenburg High students and teachers, but the police who work the area and even the school itself. In examining the project's impact, specific changes in the rates of crime and disorder in the school; the levels of fear among students, teachers and staff; and the overall attitudes of the school's participants must be examined. This evaluation includes not only the more obvious impacts regarding employment satisfaction and the school and educational environment, but also more subtle effects on student performance and their willingness to accept responsibility for their "community."

To identify these impacts, the quasi-experimental design used measures collected in three waves both schoolwide and from more than 450 students (those attending both schools' social science classes), and nearly 200 staff and teachers working at the participating high schools. The results indicate important comparisons among the individual participants and between the schools involved. More specifically, we began with and tested the following research hypotheses:

At the West Mecklenburg High School:

1. School disorder, disruptions and disciplinary actions will be reduced following implementation of the prob-

lem-solving curriculum. Examples include a decline in recorded rates of truancy, suspensions and expulsions.

2. The overall school climate will be improved following implementation of the problem-solving curriculum. Examples include better
   - morale among teachers and staff as well as attitudes about school administration;
   - race relations and perceptions of parental and community involvement; and
   - students' attitudes about the fairness and clarity of rules, attachment to school, ability to influence change and amount of respect for other students.
3. Crime, delinquency and vandalism rates will be reduced by the completion of the school crime program.

Among the West Mecklenburg High School Students:

1. Reported victimization and fear of crime will be reduced following implementation of the problem-solving curriculum.
2. Attitudes about the police, authority and social rules will be more favorable following the implementation of the program elements.
3. Student psycho-social characteristics such as positive peer associations, social integration and positive self-concepts will be strengthened following their involvement in the problem-solving activities.
4. Actual performance and attitudes about academic achievement, both educational expectations and academic outcomes, will improve following the efforts at student empowerment.
5. Individual incidents of delinquency and disruptive behaviors will be reduced following the student problem-solving efforts.

In the chapters that follow, these hypotheses are examined more fully.

Sources of Process Data

The process study phase began as soon as the project got underway and continued until the School Safety Program strategies,

including the problem-solving classes, were completely in place. To complete the process evaluation, the following sources of data were used:

Project staff interviewed key school and police administrators. These structured interviews focused on the issues affecting the police-school relationship before the project, while seeking the reactions of teachers, students and police to both the problem-solving classes and the students' program solutions that were implemented in the West Mecklenburg school.

In addition to the interviews, staff made regular observations throughout the project of the program's development and implementation, as well as problem-solving classes as they took place. Researchers who conducted on-site visits and a project assistant to the teaching staff focused on processes and content, with particular attention to key elements and decisions during program planning and problem-solving exercises.

Complementing these external observations, each participating teacher recorded observations of the problem-solving exercises in a hard-bound diary. Here again, the emphasis was on recording both processes and outcomes, including level of participation in the exercises, the numbers and types of problems identified, the potential solutions identified and selected, and the perceptions of the lessons learned and impacts from the process. In addition, teachers were asked to record any special efforts they took in the classroom, noting what did and did not appear to work effectively.

One last source of qualitative data was from the students' own problem-solving worksheets. Developed as problem-solving tools to guide the process, these worksheets documented the individual steps of the four-stage process. As each problem-solving student group recorded its efforts, the worksheets served to catalogue the results for later use. Maintained in each classroom, these worksheets describe the discussions, steps and processes used by the students, often in considerable detail.

Sources of Impact Data

Beyond the qualitative data, there were surprisingly rich and accessible measures available to examine anticipated impacts. These data sources include 1) the *Effective School Battery* (ESB) -

a published, standardized survey of teachers' and students' attitudes about their school, the educational process and their roles (collectively and individually) in the school environment; 2) schoolwide disorder, disruption and disciplinary data; 3) data on crimes reported on school property as well as related calls for police services; and 4) performance data, including grades, of individual participating students.

These primary sources of impact data are discussed more fully below.

The *Effective School Battery* (ESB)

A 115 to 118 item instrument, the *Effective School Battery* measures secondary school climate and safety issues using scientifically derived scales. In assessing school climate, students and teachers answer multiple choice questions not only about the school and school environment, but also about themselves, their peers and their own fears, attitudes and expectations (Gottfredson 1984). Researchers can analyze either individual items of interest or produce a more general school profile using a set of scales measuring both teacher and student school climate indices. In the process, specific student attitudes concerning school safety and disorder are measured. This analysis will focus on many of those individual items. Some of the more relevant student scales from the ESB include

(a) *Positive Self Concept* - a scale for students to describe themselves. Items range from "I'm no good at all" to "I like myself."

(b) *Interpersonal Competency* - measures the degree to which the average student feels competent in interpersonal relationships.

(c) *Positive Peer Associations* - describes peer relations for the average student. High scores reflect students with friends who value school and low scores represent youths tending to engage in more disruptive behaviors.

(d) *Social Integration* - a scale designed to assess whether students feel integrated with, or alienated from, the social order of the school.

(e) *Attachment to School* - a measure of how well students like school or whether it is seen as a drab place to be.

(f) *Belief in Rules* - a scale measuring the extent to which students believe in the validity of conventional social rules. Schools that score higher on this scale have experienced less teacher victimizations, while those with low scores report more delinquent student behaviors.

(g) *Respect for Students* - a measure to indicate how students feel they are treated in the school—with dignity or with lack of respect.

(h) *Fairness and Clarity of Rules* - a measure to indicate whether students know or understand school rules and if they believe the rules are fairly administered.

(i) *Student Influence* - indicates the extent to which students believe they are able to influence changes in school policies that affect them.

(j) *Educational Expectation* - a measure to indicate each student's level of academic achievement.

(k) *School Effort* - a measure of how much care and effort students devote to school work.

The *Effective School Battery* was derived and validated on over 7,000 students and 1,100 teachers from approximately 70 middle and senior high schools at 16 locations throughout the nation. The teacher scales require approximately 20 minutes to administer while the student survey takes 50 minutes, or approximately one-half of one class period.

School Disorder, Disruption and Disciplinary Data

Administrative staff collected official school data on disorder and disruptions, including incidents such as fights on school grounds, threats and acts of minor vandalism. Disciplinary data reflecting truancy, suspensions, expulsions and drop-outs were also recorded. While research staff had expected to include analysis of this data annually for the three-year period before the program's implementation and again following the completion of the project, in fact only the project year and the year preceding it were available. Still, disciplinary and truancy trends were examined during the project year and compared with those in the school year prior to the project's design.

Official Police Crime and Incident Data

In addition to the disciplinary measures, program impact was also examined using reported crime and calls for police services at each high school. These data are routinely collected by police and summarized monthly into specific offense categories (see table 3.1). As with the school data, these measures were gathered for both the project year and the preceding year so that crime and incivility trends could be examined. Comparisons between schools were conducted as well.

Student Performance Data

Finally, student grades and other measures of individual performance - such as awards received and participation in extracurricular activities - were collected where available. Given the number of participating students, and the frequency that grades are assigned, these data were aggregated so that general comparisons both between schools and between students during the project year and their peers from the previous year could be made.

The Data Collection Process

The actual collection of project data occurred over a four-step process that began during the final semester of the 1993-94 school year. At that time, research staff examined official police and school records, along with demographic data, to identify and select project sites. The process evaluation then began.

The *Effective School Battery*, school disorder and disciplinary data, reported crimes and incidents requiring police services, and student performance measures then followed using a three-wave process. The first wave - a pretest - was administered during May 1994. While the official data was collected school wide from each administration, only the cohort of students who would participate in the problem-solving classes received the ESB. Those students were completing their tenth grade school year at that time and would begin the required Eleventh grade social science classes the following year. During the summer months that followed, the project's planning

process, police/teacher conferences and curriculum design sessions were also completed.

The second and third waves of data collection followed at the completion of the project year's two semesters – December 1994, before the Christmas break, and May 1995, at the school year's end. During each wave, data were collected from both schools, all teachers, and all participating students.

In the chapters that follow, the data collected and the results of the process and impact analyses are presented.

5

CONSTRUCTING A PROBLEM-SOLVING MODEL FOR SCHOOLS

To involve teachers and create a sense of ownership of the problem-solving process, those managing the classroom implementation developed the School Safety Program curricula. Obviously, the final problem-solving model had to be flexible enough to be managed by teachers and students, yet sufficiently in-depth to address the complex problems in schools. At the request of the West Mecklenburg High teachers, the initial project planning sessions and the problem-solving curricula design began at a three-day retreat held away from the school in a nearby city. The classroom teachers preferred this remote site because they rarely had a chance to collaborate and interact at length with others regarding program development in settings other than their own schools; they were convinced that the retreat atmosphere would underscore the importance of the project. In addition, they reasoned that the design process should occur outside of the normal teacher workday and away from their classrooms so they would not be interrupted and could maintain a consistent focus. Finally, by including administrators and the school's police resource officer, the teachers believed that the sessions would improve communications among the project's participants and clarify expectations. Interestingly, the classroom teachers chose this approach in lieu of direct payment for their extracurricular involvement.

Early in the 1994 summer period, three teachers, the school principal and assistant principal, one resource officer and both project evaluators (the design team) met in Savannah, Georgia to complete the School Safety Program design. What follows is a discussion of the pre-problem-solving components, the proc-

Figure 5.1
Problem-Solving Training Agenda

	Day 1
9:00-10:00	Introduction to Problem Solving and Community Policing
10:00-10:30	Pre-Problem-Solving Components
10:30-10:45	Break
10:45-11:15	Continue Pre-Problem-Solving Components
11:15-12:00	Problem Identification
12:00-1:00	Lunch
1:00-3:00	Problem Identification
3:00-3:15	Break
3:15-5:00	Problem Analysis
	Day 2
9:00-10:30	Problem Analysis
10:30-10:45	Break
10:45-12:00	Strategy Formulation
12:00-1:00	Lunch
1:00-2:00	Continue Strategy Formulation
2:00-3:00	Plan Evaluation
3:00-3:15	Break
3:15-5:00	Integrate Problem Solving Into the Curriculum
	Day 3
9:00-12:00	Finalize Problem-Solving Sequence and Curriculum

ess used to develop the problem-solving model and the roles of each participant during classroom problem solving. Figure 5.1 describes the retreat's agenda.

Planning for Problem Solving

The retreat began by introducing the general models of problem solving that were to serve as a basis for the school safety model. This included general examples from the respective literatures on how the problem-solving process has been successfully applied. The relationship between problem solving and community policing was also discussed but couched in terms of

Figure 5.2
Objectives of Community Policing as Applied to the School Safety Program

1. Increase positive interactions among police officers, teachers, students and other school personnel.
2. Establish and maintain mutual trust among students, teachers and the police.
3. Understand and eliminate the causes of crime and the fear of crime on the school campus.
4. Increase contact between students and the school resource officer so that the officer becomes knowledgeable of the students and the underlying climate on campus.
5. Increase the job satisfaction of teachers and the school resource officer.
6. Improve the quality of life in school.
7. Create an atmosphere of safety that enhances the potential for learn-

the school as community and the students as residents of this community. The objectives of community-focused policing were discussed to illustrate how these criminal justice concepts can be applied to the classroom.

Before beginning work on the process itself, the design team first agreed on the pre-problem-solving components that would set the stage for successful problem solving. These included an introductory understanding of the concepts of community policing and problem solving by the students; an acceptable definition of the purpose of the school's problem-solving groups, as well as acceptable group behavior; a consensus on optimal group size and group membership; and the establishment of support for the project, both inside the school and from external groups such as parents, central administrators and local business groups. Finally, the number of days per week to devote to problem solving was considered, with a flexible target of once weekly being agreed upon.

It was assumed that eleventh grade high school students would have little or no knowledge of either community policing or the role that problem solving can play in enhancing the safety of one's community. Therefore, the design group decided that an early implementation step would include the

school resource officer explaining these concepts as they relate to the school environment. The participating teachers would then discuss the roles that problem solving can play in other realms of self-government by offering both historical and more contemporary examples. These discussions were seen as setting the context for the problem-solving activities that would follow.

In addition, to orient the students to the problem-solving work that was ahead of them, the design group defined the goals of the problem-solving groups so that each teacher could relate those goals to the types of activities the students could expect to undertake over the academic year. But first, the rules for acceptable behavior while in the problem-solving groups would have to be established. The design group's teachers were fully aware of the potential for high schoolers to veer off task in small group situations and deemed this necessary. The guidelines agreed to were carefully discussed and posted in each participating classroom.

Because class sizes ranged from 25-30 students, group size and group membership were also considered to be important issues related to successful problem solving. While no similar efforts were available for comparison, the school-based psychological literature does appear to indicate that the optimal size for a student-led problem-solving group would be around six students. As such, no more than six, but no fewer than four, was set as a target for the project's groups. As an added benefit, the design team agreed that this goal would also make each group more manageable for the teachers assisting them. In any case, partitioning each class into smaller groups was seen as crucial because a single student can often find it easier to emerge as either a positive group influence or a disruption to the problem-solving process in a larger group setting. In meeting this goal, the design group's teachers decided that the problem-solving groups formed in each class should be roughly equal in terms of expected student participation, academic ability and behavioral characteristics.

In previous civic responsibility efforts, the West Mecklenburg teachers noted that informal problem solving had been

Figure 5.3
Guidelines for Acceptable Group Behavior

1. Everyone is expected to participate.
2. Everyone will complete the work forms we have developed to help you.
3. One person will speak at a time and others will listen.
4. Desks will be arranged so that everyone in the group can see one another to enhance communication.
5. Everyone in the group will evaluate the other group members, which will be used as criteria for your grades.
6. We will be respectful of each other.
7. Each group will select a record keeper to maintain a list of group members' tasks and responsibilities.

attempted in some classes, although the efforts had been expert-led since the teachers had identified problems and assigned students to implement mutually selected interventions. In these cases, they believed that there was a general lack of student participation, unsuccessful outcomes and student feelings of limited influence. Among the lessons learned from these experiences, the teachers reported a need to build and demonstrate support prior to beginning problem solving – not only from the school's administration, but from others externally connected to the school. This support, they added, should be clearly demonstrated from the outset. To do this, the curricula design group planned for the school's principal, police resource officer, central administration representative and representatives from parent and community groups to acknowledge the effort and pledge their support for the School Safety Program. This, they felt, would give the students the sense that not only were others aware of the School Safety Program, but they were also volunteering their resources to assist in any way possible with the program. And, in fact, were such resources to actually be necessary later, these early declarations would increase the likelihood that they would be forthcoming.

Finally, the design group discussed the number of days per week that they intended to commit to the student problem solving. While each member appeared to agree that two days per week would be ideal, this level of involvement was thought unlikely given the competing classroom demands including dis-

trict and state curriculum requirements, tests and other school activities. Therefore, one day per week was targeted for problem solving.

Problem Solving in Practice: The Model as Constructed

Because the classroom teachers were integral to the project, it was important that they be involved from the beginning in the development of the specific problem-solving model to be used in the classroom. The model that provided a starting point for the program was derived from a combination of Bergan (1977) and Kratochwill, Elliott and Rotto's (1990) work in problem solving as it relates to psychological consultation, and Goldstein (1990) and Eck and Spelman's (1987) work on problem-oriented policing. The problem solving models used in each of these areas – psychological consultation and problem-oriented policing – share a number of common features and are particularly well suited for adaptation to classroom use. The similarities are outlined in table 5.1.

As discussed above, work on the process began with the design team's discussion of problem solving in general and the School Safety Program's goals more specifically. These objectives were merged with the civic responsibility component of West Mecklenburg High School's U. S. History curriculum. The problem-solving component was combined with civic responsibility because the objectives of both are so complementary, the history teachers at West Mecklenburg High were enthusiastic and open to new ideas, and the school's history curriculum is year-long rather than only one semester. The four-stage problem-solving model – problem identification, problem analysis, strategy formulation and plan evaluation – was then presented, stage by stage, with a primer on the objectives for each stage.

In presenting problem solving, project staff compared the process to a funnel where problem identification lies at the widest part and plan evaluation at the narrowest. As students begin problem solving, they collect broad and very general information to properly identify the wide range of problems in their school. As they move through the stages and down the funnel,

Table 5.1
Features of the Psychological Consultation Problem-Solving Model and the Problem-Oriented Policing Problem-Solving Model

Psychology	Policing
Four Step Model of Problem Solving	*Four Step Model of Problem Solving*
1. Problem Identification	1. Scanning
2. Problem Analysis	2. Analysis
3. Plan Implementation	3. Response
4. Plan Evaluation	4. Assessment
Psychologist as facilitator of problem solving	Police officer as facilitator of problem solving
Psychologist acts as collaborator rather than as expert	Police officer acts as either collaborator or expert
Emphasis on shared problem solving	Emphasis on shared problem solv-

their focus becomes more narrow. Their efforts are directed at eliminating or at least reducing the identified concern. By the time they reach the end of the funnel, they are evaluating the effectiveness of their response so that refinements in the earlier stages can be made. By then, the students' focus is quite narrow, especially when compared to the broad nature of inquiry that began their problem-solving process.

As the specific steps for the problem-solving stages took shape, the planning group designed worksheets for facilitating students' and guiding their progress. These worksheets also provided teachers and the project staff with a permanent product to evaluate not only individual students but the collective efforts of the student groups as well.

Identifying Problems

The design group spent considerable time considering the steps involved in problem identification. Since much of the current evidence suggests that it is the most critical stage of problem

Figure 5.4
Objectives of Problem Solving and Civic Responsibility for the U. S. History Curriculum

1. Practice effective problem-solving skills including
   - problem identification,
   - problem analysis,
   - strategy formulation, and
   - plan evaluation.
2. Create an environment to promote student-directed learning.
3. Provide opportunities for developing and utilizing critical thinking skills.
4. Provide opportunities for developing collaborative efforts.
5. Enhance good citizenship in school and the community.
6. Develop and enhance effective decision-making skills.
7. Enhance school pride and a sense of community.
8. Increase respect for self, others and property.
9. Improve social skills.
10. Encourage participation in the educational process.
11. Promote academic excellence.
12. Promote active leadership through team participation.
13. Enhance self-concept.
14. Promote a positive image of the school in the larger community.

solving, four substeps were created to assist the students. Such concrete tasks would be helpful to even experts, much more to this project's eleventh graders, who needed shorter, more concrete steps as guidance (see Webster et al. 1989).

The initial step in problem identification is allowing students to air their grievances and complaints, getting them out of the way so they can begin to identify legitimate school safety concerns. Essentially, this step involves students' brainstorming of all problems that they see experienced in their school. This process can be quite brief, or can require weeks (or longer) to complete and can resemble the "gripe" sessions so familiar to classroom teachers. Even so, the teachers were cautioned not to hurry students through this early step, but to listen attentively in order to judge when each group was ready to begin identifying specific problems.

Perhaps the only difference between the first and second steps of problem identification is that in the first, the participating students are merely listing all potential problems that might be suitable for problem-solving. As they proceed, however,

they begin narrowing the issues or eliminating those concerns that no longer exist, are more complaints than problems, or are a concern for only one or a few students at most.

Once students have narrowed their focus, they progress to a third step where they must prioritize the remaining problems – that is, students must develop some order for addressing them. Generally, there are at least three methods for prioritizing problems: 1) order them from the easiest to the most difficult to solve; 2) list cases where if one problem is solved, several others will be solved concurrently (also called the umbrella method because several problems can reside under the umbrella of a larger problem); and 3) order them from the most harmful to the least harmful. While many people tend to select the third option, in fact, the first – working on the easiest problem first – may be preferable, especially for inexperienced problem-solvers such as high school students. Not only does early success build momentum for the future, but those same successes will also often reinforce the method's value, increasing the likelihood that problem-solving efforts will continue. Regardless of the prioritization method used, however, the student groups should be pressed to present a rationale for their decision.

After the top priority problem has been identified, the students are ready to establish a preliminary goal statement. Obviously, since no data have been collected at this point in the process, the goal statement will be tentative and, in fact, is likely to change once the nature and extent of the selected problem is better known. At this point, however, the students are moving down the problem-solving funnel to establish the direction they intend to follow.

Finally, the fourth step of problem identification can best be viewed as a summary of the work done thus far and preparation for problem analysis. The specific problem is restated by the students and examples are provided allowing them to generate possible hypotheses about why the problem is occurring (hypotheses that will be testable during problem analysis). As part of this step, the students must also decide how baseline data will be collected, when data collection will begin, and how data will be reported in an effort to confirm or deny the exis-

Problem Identification Worksheet – Step 1

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Items discussed:

Problem Identification Worksheet – Step 2

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Problems identified:

Problem Identification Worksheet – Step 3

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Problems prioritized:

General goal statement:

Problem Identification Worksheet – Step 4

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Review the steps of problem-solving you have used to this point.

State the specific problem:

Give examples of where the problem occurs:

Which setting is causing the most difficulty?

Hypothesis: Based on what you already know, what do you think is causing the problem?

How will you gather and report data (information)?

When will you begin collecting data?

tence of the problem as it is currently identified. Here, the planning group expressed concern that given the relative inexperience of students with gathering and reporting data, failure might be preordained unless additional instruction in these two areas was provided. While such lessons were the responsibility of each teacher involved, several examples of basic data collection techniques appropriate for the school environment were provided in advance. In addition, the problem-identification worksheets designed for this first stage of problem solving were developed to guide students through the process.

Analyzing Problems

The goal of analysis is to identify the factors and conditions that cause the identified problem. The heart of problem solving, this is the stage that is most often overlooked in the process as many problem-solvers, both novice and experts, rush to strategy formulation – a serious oversight. It is the analysis that tells us why a problem occurs and suggests the types of responses most likely to be effective. Without a thorough analysis, the chances of identifying an effective solution are greatly decreased, as is the ability to determine why the selected solution failed to solve the problem.

The curriculum design group divided analysis into three steps with distinct goals for each. The first begins by prompting the students to examine their data to determine how they should continue or if they should return to problem identification, where the problem can be better defined. Even experts often find that after gathering even preliminary information, what had seemed a serious concern was, in reality, either not a real problem, overstated, or merely a symptom of some other related condition. If so, the participating students should be led to return to problem identification to redefine the target problem and, thus, the factors that are influencing it. A precautionary step, this requirement is included to demonstrate the nonlinear nature of the process that requires evaluation and decision making at each stage. In addition, the added effort increases the chances that successful problem solving will occur

by preventing an analysis of an incorrect or poorly defined problem. Once assured of an accurate focus, however, the student groups can then begin identifying the environmental conditions (antecedents, sequential conditions and consequences) related to their problem while determining the harm(s) that the problem creates (e.g., social, personal, educational, economic).

Measuring Problem Strength

The second step of problem analysis is concerned with specifying the strength of the problem in terms of the frequency, or rate, of occurrence, as well as the duration of each occurrence of the problem and the length of time that the problem has been occurring. At this point, the analysis is largely complete. As a final precaution, however, the students are once again asked to determine if their problem is properly identified or if a return to problem identification for restatement is necessary. As before, the teachers were reminded to stress to students that by returning to problem identification at any point in the process they have not failed, rather they have undertaken a process of adjustment to result in a more effective solution.

Finally, at this point the students should restate their hypotheses about why the problem they selected is occurring. The planning group added that this should include having students compare their original understanding developed during problem identification with their current hypotheses to show how ideas change as a result of accumulating information.

Preparing for a Response

The final step of analysis is best conceptualized as preparing for strategy formulation. Here students are prompted to ask questions that will benefit them as they prepare a response for the identified problem. As with the hypotheses, during this step the goal statement prepared earlier is made more specific in terms of what the students would like to have happen instead of the problem. When forming these goal statements, students should be encouraged to be realistic and understand that complete amelioration of their problem may be unlikely. Reducing

Problem Analysis Worksheet – Step 1

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Now that your data is collected, should you continue with analysis or restate the specific problem?

Identify antecedents (what happens before the problem occurs):

Identify sequential conditions (what else is happening or not happening while the problem occurs):

Identify consequences (what happens after the problem has occurred):

What harm results from the problem?

Problem Analysis Worksheet – Step 2

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Problem strength:

A. How often does the problem occur?

B. What is the duration of each occurrence of the problem?

C. How long has this been a problem?

Now that you have conducted your analysis, should you continue or restate the specific problem?

Hypothesis: What are your conclusions about why the problem occurs?

Problem Analysis Worksheet – Step 3

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Tentative definition of goal: What would you like to happen instead of the problem?

Assets question: What resources are available to help solve the problem?

Existing procedures: What procedures or rules have already been established to address the problem?

Problem Analysis Summary

(To be completed by staff facilitators)

Date: _____

Teacher: _____ Period: _____

Strength of problem:

Antecedent conditions:

Sequential conditions:

Consequent conditions:

Interpretation of problem:

the problem's intensity, frequency or duration - as opposed to complete elimination - may, in fact, be a far more attainable outcome. Similarly, relocation of the problem or reduction of the harm it causes may be acceptable initial options. Whatever goals they desire, it is important that the students be reminded that these are the standards upon which the evaluations of their responses will be based.

As the last step in their analysis, the student groups should conclude by identifying the assets available to help in solving their problems. This list of assets may include school and other personnel, money, assistance of external agencies or organizations or even existing school or central administration efforts to address the same or a similar problem. During this final step, any rules or procedures already in place to address the problem should be determined and assessed for their potential for success and application to the student-led effort. Obviously, it is important that the students identify what has already been done, or is being done, to solve the problem so as to avoid replicating unsuccessful efforts and duplicating others. As before, the design group designed problem-analysis worksheets for this stage of problem solving.

Strategy Formulation

Psychologists label the third stage of problem solving "plan implementation," while the police refer to it as "response." When this project's planning group examined and discussed what actually occurs during this third stage, however, the term "strategy formulation" was selected instead. Where "plan implementation" and "response" imply implementing a selected response as the sole activity at this stage, in fact, much planning remains to be done. Therefore, the design team developed three steps to address the planning and preparation that go into designing an effective response plan.

Narrowing the Response Options

Initially, strategy formulation resembles problem identification. At this stage, however, the problem has been stated, examined, possibly restated and thoroughly analyzed, so it is time to develop a response based on the information collected. To do so,

the student groups are encouraged to begin this stage by first brainstorming all possible responses. At this point, viability of any single solution is secondary. The goal, instead, is to generate as broad a list of possibilities as possible.

After a number of potential solutions have been proposed, those that are not feasible or likely to work can now be eliminated. What remains can then be prioritized according to the potential for each to accomplish the outcome goal(s) previously stated. It is worth mentioning that it is unlikely that any one idea will constitute the final response selected; far better that the students instead take components from several individual ideas, combining them into a single response strategy.

After the Response is Chosen

Once the response is chosen, some pre-implementation planning needs to occur. For example, since the response will be carried out on school grounds, the students' plan will probably need approval by teachers, the school principal and perhaps even the central administration. It is wise to secure permission prior to outlining the plan since an unapproved plan cannot usually proceed. In some cases, a response plan may require materials and resources beyond those normally available at school. In such instances, these should be identified along with how and where they can be secured. Specifying students or groups of students to carry out these preliminary actions helps to ensure that they will be accomplished.

Setting Realistic Expectations

The next step to strategy formulation involves outlining the chosen response and indicating who will be responsible for each component. Once completed, this is an ideal time for each student group to realistically estimate whether its plan will accomplish all or only part of the goal specified previously. Because the next stage in problem solving is plan evaluation, the students should also indicate how their evaluation data will be collected following implementation. This data collection plan may simply be an extension of how data were previously collected, although revisions may be necessary depending on the

Strategy Formulation Worksheet - Step 1

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Brainstorm possible interventions:

Strategy Formulation Worksheet – Step 2

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Consider feasibility and choose among alternatives:

Is there anything that needs to be done before the plan is implemented?

Who will be responsible for these preliminary actions?

Strategy Formulation Worksheet – Step 3

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Outline the plan and who might be responsible for each part:

Will this plan accomplish all or only part of the goal you selected earlier?

Strategy Formulation *Step 3 — Page 2*

State the specific goals this plan will accomplish:

What are some of the ways the data might be collected?

Strategy Formulation Worksheet – Step 4

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Realistically, what are the most likely problems with implementing the plan?

What are some possible procedures to follow when the plan is not working or when it is not being implemented correctly?

Implement the plan.

Problem Analysis Summary

(To be completed by staff facilitators)

Date: _____

Teacher: _____ Period: _____

Describe the plan in detail and who is responsible for each part:

Specify the data collection method(s):

Identify potential problems with implementing the plan:

Specify the procedure to follow when the plan is not working or when the plan is not being implemented correctly:

response chosen or difficulties encountered with the original data collection method.

Finally, preparing for a response should include a process for troubleshooting – that is, each student group should identify the problems most likely to be encountered during implementation of its plan and what procedures its members will follow when the plan is not working or not being implemented correctly. While it is not necessary that the students specify what they will do, a procedure to follow when things do not go as expected may be important.

Now the plan is ready to be implemented! As before, the curriculum group created summary worksheets for themselves and their students to assist with strategy formulation.

Plan Evaluation

Plan evaluation, also known as the assessment phase, begins as soon as the response plan is implemented. During this stage, two basic questions must be answered: 1) Was the plan implemented as designed? and 2) Was the plan effective? The first question obviously refers to response integrity. If the students addressed the details of their plan and monitored its implementation, it is likely that their plan will have a high degree of integrity. In those situations where the response does not produce the desired impact, integrity is especially important since the students will want to determine whether the plan itself was faulty or whether it failed because it was not implemented properly.

To answer the question of impact, the students must recall the goals they specified earlier and compare their current data with that goal statement. Here, the planning group noted that teachers should stress to students that in the early steps of assessment, the goal may not yet be accomplished even if the problem is headed in the desired direction. It is important for students to realize that problems do not immediately stop simply because they have implemented a plan. Successful problem reduction or resolution takes time, but ongoing evaluation of effectiveness will tell if their efforts are on target.

Plan Evaluation Worksheet – Step 1

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Was the plan implemented?

What was the goal as specified in the strategy formulation?

Was the goal attained?

How do you know that the goal was attained?

Plan Evaluation Worksheet – Step 2

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

What is likely to happen if the plan is removed?

What is likely to happen if the plan remains in place?

Identify new strategies to increase the effectiveness of the plan:

How can the plan be monitored in the future?

Plan Evaluation Worksheet – Step 2

Student: _____ Date: _____

Teacher: _____ Period: _____

Group Number: _____

Post-implementation planning:

Plan modification:

Follow-up assessment:

The second step of plan evaluation can be called forecasting and usually occurs after the goal has been met since the students must determine what is likely to happen if their plan is removed as well as if it remains in place. Obviously, there are no correct answers to these questions, which require educated guesses based on what the problem was like before the response intervention was implemented and what factors the response plan has controlled or eliminated.

Should the students decide that their plan should remain, they may have new ideas or have uncovered new strategies during implementation that may increase the effectiveness of the plan. Often, the problem changes as a result of intervention, which may necessitate refinement of the plan. Regardless of whether the plan changes or remains the same, however, some procedure should be developed to monitor the plan in the future. Such monitoring will allow the students to assess the long-term impact of their plan, the indirect effects (both positive and negative), and strategies to increase response strength should the problem return to its original level.

Grading Criteria for Student Problem Solving

With classroom process designed, the curriculum group agreed that as a component of the school's U.S. History curriculum, participation in and the products derived from the problem-solving efforts should be evaluated as classwork. The goals of the grading format were to provide teachers with a system to evaluate student efforts relative to the problem-solving process while being flexible enough to allow teachers to incorporate their individual grading schemes.

The grading system for the process utilizes three different measurements: 1) peer evaluations, 2) worksheet evaluations, and 3) teacher observations. The relative weights assigned to each measurement may be decided by the individual teacher. In addition, the actual grading format for each of the measurements may be individualized as well.

As designed, peer evaluations are completed after group meetings to allow each student to rate all others in his or her

group using the rating scale provided in table 5.2. The letter grades that correspond to the numbers on the rating scale can be determined by each teacher. In addition, after the students complete each step within the four stages of problem solving, the teacher examines the student worksheets for completeness. Each worksheet may be treated as a daily grade, depending upon the teacher's classroom grading system. At the end of each stage, the teacher assigns a grade to each student based on observed performance in the group and a personal responsibility log that each student maintains. These three grades – the peer evaluation, worksheet grades, and teacher observations – are then combined to form a Composite Stage Index that represents the student's grade for the School Safety Program's portion of the course.

Apart from evaluating process performance, teachers may also wish to evaluate the written products that result from the completed process. For example, a final report may be written by each student that summarizes what happened at each stage of the problem-solving process. The structure of the report would, of course, vary from teacher to teacher as each determines format and other stylistic issues.

Constructing a Curriculum Sequence

The final task for the School Safety Program curriculum group was to determine a sequence for the integration of problem solving into the U.S. History curriculum. To build early support, it was agreed that the first week of the school's first semester would be devoted to the program's introduction. Included in that introduction would be presentations by the school's principal, police resource officer and, if possible, the district's superintendent, president of the PTA and a local community or business leader.

These demonstrations of support would be followed by the individual teachers who would explain the program's goals, discuss the problem-solving model, and present examples from history on how problem solving has been used effectively. Of course, the guidelines for group participation and classroom

Table 5.2
A Design to Grade Problem Solving at West Mecklenburg High School

Stage 1 (Problem Identification):

Step 1	X_W	PE (mandatory)	
Step 2	X_W	PE (optional)	
Step 3	X_W	PE (optional)	
Step 4	X_W	PE (mandatory)	TO

$\overline{X_w} + \overline{X_{PE}} + \overline{TO}$ = Composite Stage 1 Index

Stage 2 (Problem Analysis):

Step 1	X_W	PE (mandatory)	
Step 2	X_W	PE (optional)	
Step 3	X_W	PE (optional)	
Step 4	X_W	PE (mandatory)	TO

$\overline{X_w} + \overline{X_{PE}} + \overline{TO}$ = Composite Stage 2 Index

Stage 3 (Strategy Formulation):

Step 1	X_W	PE (mandatory)	
Step 2	X_W	PE (optional)	
Step 3	X_W	PE (optional)	
Step 4	X_W	PE (mandatory)	TO

$\overline{X_w} + \overline{X_{PE}} + \overline{TO}$ = Composite Stage 3 Index

Stage 4 (Plan Evaluation):

Step 1	X_W	PE (mandatory)	
Step 2	X_W	PE (optional)	TO

$\overline{X_w} + \overline{X_{PE}} + \overline{TO}$ = Composite Stage 4 Index

X_W = average worksheet grade
PE = peer evaluation
X_{PE} = average peer evaluation
TO = teacher observation

Final Grade = The average of Composites 1,2,3 and 4

Peer Evaluation Sheet

Group # _____

Group member #1_____

Scale: 1 - Inadequate
2 - Acceptable
3 - Good
4 - Excellent

____ Contributed to discussions
____ Remained on task
____ Overall participation

Group member #2_____

Scale: 1 - Inadequate
2 - Acceptable
3 - Good
4 - Excellent

____ Contributed to discussions
____ Remained on task
____ Overall participation

Group member #3_____

Scale: 1 - Inadequate
2 - Acceptable
3 - Good
4 - Excellent

____ Contributed to discussions
____ Remained on task
____ Overall participation

Group member #4_____

Scale: 1 - Inadequate
2 - Acceptable
3 - Good
4 - Excellent

____ Contributed to discussions
____ Remained on task
____ Overall participation

Group member #5_____

Scale: 1 - Inadequate
2 - Acceptable
3 - Good
4 - Excellent

____ Contributed to discussions
____ Remained on task
____ Overall participation

Group member #6_____

Scale: 1 - Inadequate
2 - Acceptable
3 - Good
4 - Excellent

____ Contributed to discussions
____ Remained on task
____ Overall participation

grading format would be explained as well. The school's principal agreed to repeat his support for the program during an Eleventh grade convocation.

In the program's second week, actual problem-solving activities would begin with the teachers explaining the four-stage process in greater depth. In addition, teachers would help form student groups and describe the teachers' role as facilitators, rather than directors, of the process. During the third week, students would hold their first group meetings and the teachers would introduce them to problem identification and what they should accomplish at this stage. Students would also be given their first worksheet so that they would not be encouraged to hurry through the process.

The planning group conservatively estimated that the students would require at least seven weeks to accomplish problem identification. It was agreed, however, that this was to be used as an estimate only, which should not become a barometer by which to measure problem-solving progress. Problem analysis and plan implementation was estimated to require about six weeks, with a couple of weeks for plan evaluation.

Figure 5.5 outlines the curriculum sequence, as designed for the West Mecklenburg High School classrooms.

Figure 5.5

Curriculum Sequence

Week 1
Introduction to the School Safety Program:
A. Community policing (School Resource Officer)
B. Problem solving (Teacher).
C. Historical perspectives on problem solving (Teacher)
D. Administrative support for the program (Principal).
E. Grading criteria for the problem-solving groups (Teacher).

Week 2
A. Four-stage school-based problem-solving model.
B. Teacher's role as facilitator of the problem-solving groups.
C. Support for the program.

Week 3
A. Guidelines for acceptable group behavior (Teacher).
B. First group meetings.
C. Introduction to problem identification.
D. Other support for the program (e.g., police, parents, community groups).
E. Grading criteria for the problem-solving groups.
F. Beginning problem identification. (The first few sessions of problem identification will be mostly gripe and complaining sessions. Be patient! After they get the hang of it and get feedback, they will progress much faster.)

Weeks 4-10
A. Continue problem identification until ready for problem analysis.
B. Introduction to problem analysis.

Weeks 11-15
A. Continue problem analysis until ready for strategy formulation.
B. Introduction to strategy formulation.

Weeks 16-17
A. Introduction to plan evaluation.

Weeks 17-?
A. Continue evaluating the plan.
B. Start the process over again.

6 EFFECTING CHANGE FOR SCHOOL SAFETY

> [T]he newest component of civic responsibility at school is problem solving. You will be asked to identify the problems and your concerns at school and devise strategies and plans to bring about positive changes. Using the four step problem-solving method, we will teach you how to become critical thinkers which will help you in your pursuit of academic excellence... We are here to help you in your research and provide you with whatever resources are available to see your plans through. This includes all administrators, teachers, counselors, the student government, PTA, and the school resource officer. This program also has the full support of the police department who, if you decide it to be necessary, will be available as a resource. Also, within the school system, we have the endorsement of the Board of Education and the Central Office personnel. These folks are ready and expecting to hear from you (Principal Williams' opening day statement to eleventh-grade West Mecklenburg High students, 1994).

The School Safety Program began on the first day of school with the West Mecklenburg High School's principal pledging his support and resources for student problem solving (see appendix A). Addressing the eleventh grade student body, Principal Williams prepared students for the new work that was before them with the observation that they would "be engaging in research activities that might include devising and adminis-

tering surveys and conducting interviews in order to determine what the real concerns at the school are." Noting the importance of their efforts, he went on to promise that "[i]n your endeavors you will enjoy the full support of the school and extended communities."

Following the principal's statements, as the first week of classes got underway, the school's police resource officer attended each of the school's eleventh grade history classes to give a brief presentation on community policing, its relationship to civic responsibility and the problem-solving model that had been added to the course curriculum (appendix A). Observing that community policing was nearly four years underway in Charlotte, the officer reported that his department was attempting to recreate an earlier, more small-town feeling in the city "by sending police officers out to talk to the public to find out what kinds of concerns they have and what kind of changes they want." Challenging the students to do likewise in their own school, he went on to ask each class to "work together to make your community a better one to be in."

Although the original project plan called for central administration, community, PTA, and even business representatives to attend the project's 13 participating classes and add their support as well, according to the teachers the logistical problems in arranging these visits soon outweighed their benefits. Nor was there any indication that the failure of those outside of the school system to address the students dampened their enthusiasm in any way. In fact, since the students were unaware of the earlier plans, the absence was apparently unnoticed. Still, had student groups chosen more problems requiring outside resources, an early commitment from those sources could have been important.

With the project's introductions complete, each classroom teacher introduced the general concept of problem solving according to his or her individual classroom schedule. Included were common examples of how problems were solved by prominent historical figures as well as a more current example from one school district where a cultural issue involving Sikh students wearing *kirpans* to school was resolved with a problem-solving

Figure 6.1
Historical Perspectives on Problem Solving

Questions for Students and Interactions:

- **Is there anyone in here who has ever had a problem?**

  (Make a short list of the problems on the board based on student responses.)

- **Did anyone ever solve one of their own problems?**

  (Give students time to respond by raising their hands.)

- **How did you go about solving or tackling that problem?**

  (List the methods used by students on the board. Discuss with students how their methods fit into the four-stage problem-solving model by taking one of their problems and solutions and breaking it down into the four stages.)

- **Can you think of any examples in history where problem solving was used?**

  1. Generate a list on the board.
  2. Select one or two and show how it reflects the four-stage problem-solving model.
  3. Historical examples that can be used to illustrate the four-stage problem-solving model might include the following:
     - *Problems faced by the Jamestown Colony.*
     - *The labor union movement.*
     - *The civil rights movement.*
     - *The right of Sikh students in Yuba City (CA) to carry the* kirpan *to school.*

format. Teachers then assembled project groups and explained the earlier crafted "guidelines for acceptable group behavior" to complete the project's introduction.

The Teachers' Role as Mentors

Essentially, there are two general models of problem solving: expert and collaborative. In the expert model, an outside person (expert) goes to the location (community, neighborhood, school) where the problem is occurring, identifies and analyzes the problem, and provides a solution for it. In contrast, the collaborative model of problem solving emphasizes shared responsibility between the expert and those within the problem environment. In this model, the community participants then use the expert to assist as they identify and analyze the problem, brainstorm possible solutions, select a plan they view as appropriate and undertake the implementation. The expert's function is that of a facilitator asking the right questions and leading the other participants to the most tenable conclusions.

Contrary to the expectations of many, the traditional approach to problem solving, especially as it is used to address crime-related problems, remains almost exclusively an expert model. In such settings, police officers typically arrive with all participants expecting that they will possess the resources to create and provide some needed response. While citizens may be invited to participate through community meetings, a survey process or some other form of information gathering, the responsibility for problem identification, analysis, solution formulation and action usually remains with the police. Even though officers are encouraged to engage the community and bring diverse information to bear on the problems being addressed, given the pressures of other police responsibilities, that often means little more than superficial community input. As a result, the basic roles of police and community remain unchanged. More important, however, is that such a process does little to enhance citizens' perceptions of real control over the problems in their neighborhoods; fails to encourage grassroots empowerment, since no proactive role for preventing or ad-

dressing crime problems is developed; and has little effect on communications between police and citizens that might be of long-term benefit to the community.

In the school setting, a collaborative model of problem solving should be used instead. As defined, collaborative problem solving represents a different way in which an outsider (teacher) could interact with community members (students) in an effort to identify and solve problems. Instead of the role of the expert, the project's teachers were coached to enter each class as knowledgeables intending to mobilize the individual problem-solving groups to address concerns and enhance informal social controls. Unlike the expert model where the outsider remains more central to the process than his or her community counterparts, the collaborative approach requires that students, teachers and police operate on equal footing in the problem-solving effort. That is, each participant brings skills and knowledge to contribute to a cooperative, rather than dominant, process. The School Safety Project adopted this approach in light of recent research indicating that most people not only prefer collaboration over the expert model (Pryzwansky and White 1983) but recognize that the more involved they actually become in the process, the more likely they are to successfully implement plans and programs (Reinking, Livesay and Kohl 1978). Related research has also shown that as a result of interactions with skilled problem-solvers, participants often report a greater degree of control over problems (empowerment) and a greater degree of satisfaction with both the process and the outcomes (Gutkin and Ajchenbaum 1984). As a result, the focus of responsibility for school-based problem solving was shifted from the police/teacher experts to the students they assisted in mobilizing for collaborative action. In doing so, however, the teachers and school resource officer involved had to first be prepared to help the participating students as they employed the four-stage problem-solving model described earlier - a model that is structured more clearly than those otherwise available at the time.

Mobilizing Collaborative Effort

The most difficult tasks facing any collaborative problem-solver are 1) learning and using the model correctly, 2) shedding the

expert role during the effort and, seemingly hardest, 3) getting community partners actively involved. As they accomplish each task, however, the expert role can be shed as problem-solving groups are formed.

Preparing others to use the collaborative approach involves six distinct training steps. First, participants in the collaboration must train in the philosophy and rationale of the model. Much of the work in problem-solving training for the police has been focused here. To date, in fact, it is likely that few officers remain who are not aware of the general concept, its guiding principal—that problems are better solved than repeatedly responded to—and the broad four-stage process to address problems. Next, the participants need direct training in the steps and substeps of the problem-solving model. Current training efforts have been the weakest in such practical applications. Indeed, most problem-solving training today relies heavily on anecdotal examples rather than structured activities and tasks that can be taught and retaught to others. As a result, coaching from supervisors remains central in most problem-solving efforts where participants will usually vary considerably in the skills and interest they bring to the process. Similarly, the third and fourth training needs require that the participants be well versed in the behaviors associated with success at each of the problem-solving steps they employ – as well as in the verbal techniques to facilitate the process with others. Given the limited and unstructured nature of current problem-solving training, however, almost no attention is given to either of these areas.

Once participants are well prepared with the process, the fifth training need, which involves skill building to develop and participate with social networks, can be addressed. If the responsibility for the actual problem-solving tasks is to rest with student groups, the participating teachers (experts) must be prepared to facilitate the effort. Finally, the sixth step to collaborative problem-solving preparation is to develop a mechanism for feedback to the participants as they practice their problem-solving skills in the target setting. As students become more proficient in the skills of problem solving, increased school involvement should be a natural by-product of their efforts.

What Problems to Solve?

Once the introductory work was finished, the four-stage problem-solving model was presented to the students, as was their teacher's role as facilitator/mentor. Each teacher was careful to explain his or her function as one of guiding, rather than directing, the process. As such, whatever problems the students identified would be pursued; teachers would not veto ideas or problems but would allow each student group to discover for itself if a particular problem existed and the constraints that might prevent them from reaching a satisfactory solution.

The teachers then divided the students into groups of four to six and began the introduction to problem identification. Each of the objectives of problem identification were discussed as were the substeps involved in identifying legitimate problems. Students were given worksheets for each step of the process, along with peer evaluation sheets and personal responsibility logs. The groups were then told to begin work.

When every group had finished all steps of problem identification, each teacher held a large class meeting so that each of the groups could present the problems they had identified and prioritized. The class could then select one problem to work on. Each group had two to three problems that they brought to the class and gave a brief presentation on why the class should choose its group's top priority problem. After all of the groups had presented their problem ideas, the class voted on one to be designated "class project"—two alternate problems were also selected.

It is not surprising that problem identification raised a variety of concerns about the school environment. While the usual issues of drugs, guns and gangs were discussed, more mundane, or everyday problems (e.g., clean restrooms, cafeteria), tended to emerge consistently ahead of the more sensational ones (e.g., weapons in school, fighting). This was expected from the experience of problem-solving efforts in other community settings. In fact, from the problem identification worksheets used by each group, a consistent picture of school-based

issues emerged. While problems in the restrooms, cafeteria and parking lots were named by virtually every group, more narrowly defined concerns such as a lack of vending machines and pay phones emerged as well. Table 6.1 outlines the problems selected by each of the 13 participating classes.

After resolving issues that might result from overlapping problems, the problem-solving process continued with the students returning to their small groups to begin problem analysis. Once finished, each group proceeded to strategy formulation with a process similar to that used for problem identification. All groups then reconvened and presented their proposed responses to their classmates. The class then selected its response and finished the third and fourth stages together.

The Role of the Students

The primary job of the students was to assume responsibility for and implement the problem-solving process. From the beginning, they identified school issues and concerns as they experienced them—not as teachers, parents or administrators might see them. This added responsibility was in contrast to the school's previous Civic Responsibility program in which teachers selected issues such as school beautification and multiculturalism for student focus and efforts. While the students were actively engaged in a problem-focused response in this earlier effort, the teachers unanimously reported poor involvement and little success. It seems that the students took little responsibility for their projects, reported no ownership and developed few solutions to the selected problems. In the current effort, however, the students themselves identified what would be considered a problem, collected data to confirm or deny its existence, analyzed the factors that contributed to its existence, and then formulated, implemented and evaluated their own response. Thus, the students actively assumed responsibility for problem solving by carrying out each of the steps at every stage of the process. While done with guidance from their teachers, the student groups remained free to conduct each stage as they believed appropriate. The pages that follow examine those efforts—looking carefully at four distinct exam-

Table 6.1
Group Issues Identified for Student Problem Solving

Class		*Problems Prioritized*
Teacher A:	1st Period	Junior parking lot Bathroom cleanliness Lunch room congestion
Teacher B:	2nd Period	Restroom cleanliness Lunch room congestion Smoking in bathrooms (lack of smoking policy)
	3rd Period	Incentives for teenage moms to stay in school Bathroom policy for smoking
	4th Period	Change smoking regulations Juniors/Seniors to leave campus at lunch Congestion producing class tardy violations
Teacher C:	1st Period	Revise bathroom policies (timeliness, cleanliness, smoking) Revise lunchroom policies (crowding, service, food selection) Revise attendance policies
	2nd Period	Overcrowded cafeteria lines Parking congestion Cleanliness/safety of bathrooms
	3rd Period	Smoking in the restrooms in the 200 building Other restroom conditions (cleanliness, supplies) Lack of parking availability
Teacher D:	3rd Period	Not enough pay phones School overcrowding (congestion in parking lots, cafeteria and hallways)
Teacher E:	1st Period*	Not enough time between classes Attendance and tardy policy too strict Parking congestion and high prices
	2nd Period	Attendance policy too strict Lunchroom congestion (conflicts from long lines) Parking congestion
	4th Period*	Fighting and violence on campus
Teacher F:	1st Period	No vending machines Insufficient time between classes Parking congestion
	4th Period	Lack of variety of food in the cafeteria Lack of variety in school subjects/activities School expenses

* Classes having difficulty reaching consensus on school problems

ples – while paying particular attention to the methods used by the groups that we regularly observed.

Fear, Food and the School Lunchroom

Identified by virtually every student group as somewhat of a problem, issues involving lunch and cafeteria procedures were of special importance to Teacher F's fourth period class. In this group, we observed that the teacher was more structured than most in her approach. For example, each day before the class arrived, this teacher arranged the students' desks into their problem-solving groups in an effort to both save time and to prevent off-task behavior during their transition into individual exercises. She then began each period with a warm-up exercise that included a reminder of where each work group was in the process, the rules for group interaction and general directions on what was to be accomplished that day. Despite her structured approach, however, she did not appear to dominate the process by deciding issues of focus or methods or steps of analysis. Instead, each group was provided a framework or blueprint for action and assigned additional activities so that their efforts could be more focused.

In examining these students' worksheets, it was apparent that they considered a number of problems and issues before selecting the cafeteria and lunchroom conflicts as a source of school concern. After their prioritization was complete, the class proposed a general goal statement (the need for greater food variety) that considered not only how cafeteria problems developed, but also how they were connected to lunchroom disorder.

To begin their analysis, this class first developed a survey for a sample of the student body to determine if food variety was a concern to others outside their class. Once the results of this survey confirmed the problem, the groups continued to discuss possible consequences of the problem as they defined it (including students waiting to eat until after school, students not eating and not as alert, a loss of school income, stomach aches and students eating in class). Unfortunately, while a fine

Table 6.2
Problems Discussed and Prioritized by Teacher F's 4th Period Class

Problems Considered	Problems Prioritized by Group	
Parking/Traffic	Group 1:	School too expensive
Lunch overcrowding		Traffic
Restroom cleanliness		Lack of school activities
Time between classes		
Food variety at lunch	Group 2:	Lack of communication
Lack of school activities		Lack of manners
Violence and fighting at school		Lack of money
Costs/Expenses for school		
Vending machines	Group 3:	Locker locations
Lack of discipline in classes		More variety in school subjects
Lack of manners		Better rewards for good grades
Locker locations		
Rewards for good grades	Group 4:	More food choices at lunch
Too much homework		No exams – unfair measure
Attendance policy too strict		Too much going on during day
Dress code/No hats		
No designated smoking areas	Group 5:	Too much violence
Lack of communication		Parking/Traffic
		Food variety at lunch
	Group 6:	Lunchroom too crowded
		Attendance policy too strict
		Traffic in parking lots

effort, this approach to analysis probably produced predictable results since most of their problem causes (restrictions on leaving campus, too few vendors, and leftovers being served) were established prior to analysis during the steps of problem identification. Beyond that, little conceptualization of specific problems and issues appears to have occurred, while the teacher failed to focus the students on a full or systematic analytic process. As a result, the class hypotheses changed only slightly as the students gathered their information. Their statement of goals did not change at all.

These students had an easy time identifying the assets available to assist them, and progressed quickly to developing solutions involving other students, local restaurants and others in the community. It was interesting that the one resource not

identified early on (the cafeteria manager) was the person who would eventually work with them to address their concerns.

As they developed possible solutions, students engaged in a period of brainstorming, although most work groups offered similar ideas, leaving a small number of responses for consideration. Further, no evidence exists that any serious consideration of feasibility was included. Instead, class representatives were selected to meet with the school's principal, who referred them to the cafeteria manager to develop a broader range of options. After meeting with the manager, this group reported back to the 4th period class, which began its new role as liaison to the student body as a whole. What resulted were ideas regarding the types of pizza most desired and how much extra pizza was needed each day. Other proposed solutions included

- different kinds of pizza each day,
- different restaurants could provide lunch (Taco Bell and others),
- add vending machines to the cafeteria,
- add salad bars and potato bars, and
- introduce ethnic foods.

As the class put their plan into action, they seemed to attend less to the problem-solving worksheets and more to coordinating efforts to make sure that the various elements were carried out. When questioned about their lack of documentation, the students reported that everyone knew what the plan was and that it was simple enough that detailed documentation was unnecessary. Also, since a smaller group of their classmates was selected to act on the group's behalf, they reported that the plan did not become as diffused as it might have, had more broad delegation taken place.

Finally, this group's evaluation was little more than an informal inquiry of others if they were pleased with the cafeteria and the resulting variety of food. In retrospect, however, the students reported that they had probably misidentified the problem, leading to results that were largely unintended. It seems that many students were regularly displeased as the pizza ran out before they reached the front of the serving line.

Table 6.3
Problems Discussed and Prioritized by Teacher E's Class

Problems Considered	Problems Prioritized by Group	
Parking	Group 1:	Attendance policy
Lunch overcrowding		Longer lunch
Food variety at lunch		
Restroom cleanliness	Group 2:	Longer lunch
Designated smoking areas		Eating and drinking in class
Congestion between classes		No lunch detention
Less homework and tests		
Violence and safety, fighting	Group 3:	Attendance policy
Food and drinks in class		Lunch time
Tardy policy too strict		Parking
Attendance policy too strict		
Dress code/No hats	Group 4:	Too much traffic
Better buses needed		Cafeteria food not good
Beepers not allowed		Too much homework
Longer lunch is needed		
Need a study hall	Group 5:	Parking
Teachers are boring		Attendance policy
Open campus for lunch		Lunch time
Shorter classes		
Rules are too strict	Group 6:	Lunchroom too crowded
Lack of school activities		Parking
	Group 7:	Parking
		Control smoking
		Allow hats

Several students wondered if, by increasing the amount and variety of food available, they had inadvertently lessened conflicts caused by students cutting in line to ensure their own lunchroom preferences.

Fighting on Campus

The class that chose this problem was in trouble from the beginning. Teacher E was a first-year teacher with students who were among the school's lowest academic achievers. Structure was clearly needed for this class. Unfortunately, the teacher was unable to control class behavior (talking out, shouting, sleeping and leaving during class) both during problem solving

and during the regular history lessons. Nor did she provide warm-up activities before beginning the problem-solving activities. She was also unable to answer student questions about the process.

Observations of this class indicated that neither the teacher nor the students were quite sure of what they should be doing for problem solving. This was evidenced by their lack of knowledge of the stages of the process and the slow progress they made as their exercises progressed. Examination of their problem-solving worksheets was difficult since many pages were missing, pages were often in the wrong folders and tests and other assignments were mixed in with the worksheets. In addition, over the course of several observations, it appeared that group composition constantly changed.

In looking at the problems initially identified, however, common themes did emerge. As with the other classes, these included lunchroom conflicts, bathroom conditions and the same issues of parking and congestion on campus. Beyond these, however, the students in this class also had complaints about general school policy (classes too long, no smoking policy) as well as about the educational process in general (too much homework). Accordingly, as they progressed through the steps of problem identification, the class had great difficulty in refining its list of problems, with new issues and concerns being added at each step.

From the worksheets, only a few students from each group appeared to have prioritized their problems of concern. Our observations during this stage also indicate that many students in each group were undecided even about how prioritization was to occur.

When the groups assembled as a class to select a single problem for focus, they chose a problem that none of the groups had indicated on their initial lists.

We are unsure why the class chose this particular problem. We assume, however, that after many problem-solving sessions the class had failed to select one, so a single problem was chosen from among the discussions in general. It was near the end

of the school year before even this occurred. Further, our observations of the classes and our interviews with the students did not indicate that they attempted any background work.

This was as far as the students in this class progressed through the problem-solving steps. They did not establish a goal, review the problem identification steps or conduct an analysis of the problem that was selected. When questioned, the students were unsure of the remaining steps in the process.

At the end of the semester, the students in this class were interviewed about their experiences with the problem-solving process. Most reported feeling dissatisfied with the effort, specifically noting that they had not progressed past problem identification. Several reported that they had no direction from their teacher and felt that Teacher E did not fully understand what else should have happened. It is interesting to note that this teacher reported feeling much the same.

Phoning Home

This class, Teacher D's 3rd period, was an honors class in history. In contrast to most others, this group solved problems well with little assistance or direction from the teacher. At the start they were provided with a rationale for problem solving and an overview of the steps involved in the process. Once done, however, the students progressed through the steps with minimal assistance from others. While they appeared to master the process, the lack of guidance was obvious in their inattention to their project worksheets and other efforts to document their group progress.

During problem identification, these students discussed a number of the concerns voiced by those in the other problem-solving classes. As can be seen from their own prioritization, however, the individual groups in this class differed greatly in the degree of specificity they provided. After discussing each possible problem, this class decided that the lack of available telephones on campus was their issue of greatest concern. It is unclear why this issue stirred so much interest, especially since only two of the six groups identified telephones as a problem at

all—none listed it first. Still, given their greater involvement in the process, it may be that they considered this a higher profile problem that would generate and sustain more interest than the other concerns identified.

As they began problem analysis, the students paid little attention to the factors related to the shortage of phones, focusing instead on the harms that they believed were resulting. Among those harms they noted were student disputes over the few telephones in place, difficulties in calling home after late-night sporting events and students having greater difficulties in getting rides home from school. When identifying assets available to them, only two came readily to mind—Southern Bell (the local phone company) and themselves. Overlooked as resources

Table 6.4
Problems Discussed and Prioritized by Teacher D's 3rd Period Class

Problems Considered	Problems Prioritized by Group	
Parking/Traffic	Group 1:	Time needed to exit parking lot
Lunch overcrowding		School overpopulation
Lunch food variety		More school spirit activities needed
Lunch too short		
Bathroom cleanliness	Group 2:	Traffic before and after school
Lack of available telephones		Long cafeteria lines
Sitting in cars before school		School overpopulated
Inadequate school facilities		
School's dress code	Group 3:	Parking lot needs added exits
Lack of school activities		Improved attitudes to other classes
Attitudes towards others		
Beepers		Overcrowded cafeteria
Violence, crime, and fighting	Group 4:	Parking lot
No time between classes		Cafeteria and hallways
Congestion between classes		Pay phones
Drink/Vending machines		
School overcrowding	Group 5:	Violence
Seniors only can leave campus		Traffic
School starts too early		Lunch menu
	Group 6:	Longer lunch
		More phones
		More lunch lines, stations

were their own parents, school officials and their school resource officer.

During response formulation, the students' activities can best be described as methodical. Of course, given the problem, the plan they produced was to get additional pay phones installed. Although simple, there were elements of the plan that had to be accomplished first. As a result, student committees were formed to address different parts of the plan (finding locations, talking to the principal, calling the phone company). After each committee performed its task, the groups came back together as a class and reported their findings. The final step of implementation was accomplished when two additional pay phones were installed.

Plan evaluation was accomplished easily and each of the students completed his or her worksheets for this stage. In addition, the class publicized its efforts by contacting the school newspaper and having an article written attributing the new phones to their problem-solving efforts.

Although the students in this class did a good job of solving the first problem they identified, they did not continue on to a second problem even though time remained in the school year. Part of this complacency may be attributed to Teacher D, who took a hands-off approach in conducting the problem-solving sessions. That is not to say, however, that she provided no direction. At the outset, she established a starting point and consistently reminded her class of the steps and stages remaining as they progressed, while letting the students find their own way through the problem-solving process. In retrospect, this style of teaching worked well with this particular group, who addressed a reasonably straightforward problem. Had this group not been as skilled academically, or had they chosen a more complex problem, the outcome might not have been as successful.

Teenage Mothers in School

The class choosing this problem had a teacher who tended to dominate the problem-solving discussions. From our observa-

Table 6.5
Problems Discussed and Prioritized by Teacher B's 3rd Period Class

Problems Considered	Problems Prioritized by Group
Parking/Traffic	Group 1: Bathroom policy
Open campus lunch	
Lunch overcrowding	Group 2: Tardy rule
Teen moms drop out of school	Bathroom policy
Bathroom cleanliness	
Designated smoking areas	Group 3: Too much congestion on walkways
Congestion between classes	
Time between classes	Group 4: Teen moms dropping out of school
Tardy policy too strict	
Bathroom policy	Need day care for children
Food variety at lunch	Group 5: Monthly student discussion group needed
Lack of school activities	
Dress code	
No beepers permitted	

tions, in fact, he seemed to spend more time discussing the pros and cons of the students' steps than they did themselves. When asked, these students had difficulty stating which stage of problem solving they were in and they did not appear to be solidly invested in the process. Even so, these students probably required more direction than they were provided.

Initially, the students in Teacher B's third period did an excellent job of identifying a number of problems needing attention. As before, many of the problems identified were similar to those discussed by other classes. When prioritizing, however, these student groups consistently selected only one problem each. After reassembling as a class, a spirited discussion followed and the need to get "teenage girls with kids to stay in school by offering them incentives" was settled upon as the problem of greatest concern. Unfortunately, this decision seemed to rest largely on the fact that two of the students in the class were themselves mothers. The teacher supported the class project by offering his own values regarding teenage mothers and their responsibility to stay in school. Given the strength of the two students and the teacher's influence on problem identi-

fication, we had doubts from the beginning about the commitment of this class to the problem it selected.

While there are no worksheet data available for this class, observations indicated that the students did no analysis. Instead, they jumped directly to strategy formulation, with much of their class time spent discussing how to get teenage mothers to stay in school rather than why they dropped out in the first place. Several times we observed students attempt to prompt analytic questions (Do they drop out because there is no one to take of their baby?) only to have Teacher B and other students refocus the discussion to a response plan. Eventually, the class decided to construct a panel to mentor junior high school students; however, that too was dropped as Teacher B explained that administrators would never support that idea. The school year ended without further progress on the topic.

Data from the Teachers

As noted in Chapter Four, each of the teachers participating in the School Safety Program was asked to keep a journal of his or her observations, reflections and impressions of the problem-solving process as it occurred in his or her classroom. Essentially, these notes were intended to serve as a qualitative analysis of the factors that impede and facilitate the implementation of a problem-solving program in a high school environment. As such, a review of these journal notes, with some analysis of the commentary, may be valuable to others replicating the process. Where appropriate, we have supplemented the teachers' observations with our own.

Initially, each of the teachers expressed some difficulty in getting the School Safety Program "off the ground." Although some of the pre-components occurred as scheduled (such as the school resource officer's visit and the principal's statement of support for the program), the actual implementation of the program was hampered by competing events that occur at the beginning of every new school year. As a result, from each teacher's journal we noted that the first problem-solving classes

did not begin until several weeks into the semester. Most teachers did not see this as especially problematic, however, since their initial concerns were more with getting their traditional history lessons started than with beginning a new program.

An additional observation across each of the teacher's journal comments involved the difficulty in determining how to integrate the School Safety Program into the regular curriculum without sacrificing instructional time to the detriment of the students. Some teachers wondered, for example, whether problem solving would be more beneficial if it occurred one time per week for an extended period of time (30-40 minutes) or several times per week for shorter periods of time (15-20 minutes). Later, our classroom observations indicate that some teachers eventually settled on a once-per-week schedule with problem-solving sessions extending up to as much as one hour. Other teachers chose smaller blocks of time two or three days per week instead. It appears from their notes that the decision on how often and for how long to conduct problem solving rested primarily on each teacher's commitment to the process as well as on the demands of the problem-solving activities themselves. For example, in one class the teacher decided that a one-week interruption during data collection would disrupt the natural momentum the class was experiencing. She decided, therefore, to devote the last 30 minutes of a class only two days later to disseminating the data being gathered. This flexibility seemed to further drive these students' problem-solving efforts. Our observations of this class indicate that the students were highly engaged in the problem-solving process and that they eventually succeeded in addressing a schoolwide concern.

Other teachers were not as flexible and chose to adhere to a pre-set schedule for the problem-solving classes regardless of what the situation might demand. For example, one teacher held her problem-solving segments on roughly the same day and time each week. It is clear from her journal, as well as from observations of her class, that her students would have responded better to more frequent, but less lengthy, sessions. In

fact, she appears to have had difficulty keeping her students focused past the first 15 or 20 minutes and their discussions never advanced beyond brainstorming possible problems (the first step of problem identification). Another teacher also tended to have extended problem-solving sessions (usually 60 minutes or longer), but usually engaged students in the process only once every couple of weeks. In this case, the result of having less frequent, but more lengthy, sessions was to provide the class with too much information to discuss from the previous session. This, in turn, limited the students' ability to progress smoothly through the individual steps of the process. In neither of these examples do the teacher's journals reflect an awareness of the relationship between the frequency and length of problem-solving classes with the eventual outcome of the students' efforts.

Several of the teachers, but one in particular, noted frustration with the expectation that they take a more facilitative, rather than directive, approach in their interactions with students during the problem-solving classes. Because of the discussions the teachers held at the project's outset, most teachers concluded that they should *never* be directive during the student discussions and exercises. One teacher commented that she knew her students were "going down the wrong road" in response to a problem they had identified but felt that she could not redirect them lest they feel a loss of control over the process. This perception of the teacher's role was shared by two other teachers who noted that they wished they had been more directive, especially during the early stages of the process. This frustration seemed to result in a temporary lack of confidence in the program. After the teachers were informed that they could be selectively direct, their confidence in their facilitation increased as evidenced by their more positive journal entries and their notations indicating greater comfort in their role in guiding the students through the problem-solving steps.

One teacher whose class quickly progressed through the problem-solving steps to solve a fairly straightforward problem (additional telephones at school), did not make as many entries

in her journal after her class solved that initial problem. Indeed, observations of her class during the middle and later portions of the semester indicated that the students were not actively engaged in addressing other problems. Perhaps the teacher and class experienced a sense of completion after that first success that prevented them from returning to problem identification to begin anew.

An additional observation made by several teachers was that they were not quite sure what they, or their students, should be doing at certain stages of the problem-solving process. For example, one teacher whose class was in the problem analysis stage noted that she did not understand exactly what type of activities constituted an analysis of the problem, at least according to how problem analysis had been presented to her. She accurately noted that if she did not understand what constituted a thorough and appropriate analysis, her students could be expected to have difficulty as well.

Similarly, nearly all of the teachers noted a relationship between students' academic abilities and their ability to move through the problem-solving sequence. Here they observed that students who have considerable academic skills required little direction, and more facilitation, while those with less academic ability required considerably more direction and task assignment. Their conclusions are quite consistent with our own. In fact, as we noted earlier, we observed students in the more advanced classes having little difficulty in understanding the problem-solving process, while those in the more basic classes did not evidence the same facility.

Finally, among the more striking observations from the teacher journals is that those teachers whose classes demonstrated the most proficiency in the problem-solving process were also the teachers most diligent at keeping their own observational notes. For example, the teacher whose class brought about changes in the lunchroom procedures kept detailed notes regarding her own impressions of the process as well as careful analyses of her role as a facilitator of the process. Conversely, the teacher who had difficulty in implementing the program

and in managing the behavior of her students made very few observations and did little more than a superficial analysis of the factors related to classroom efforts. It seems, then, that a direct relationship exists between a teacher's involvement in problem solving, his or her own observations and self analysis, and the success of his or her students in terms of school-based problem solving.

Conclusions from the Process

There exists an axiom in education that "Good teaching is good teaching, no matter what is being taught." Although teachers in this project were less directive during their problem-solving classes than during the regular sections on history, their skills as teachers played an important role in determining how well their students progressed in problem solving. For example, those teachers who wrote objectives for each stage of the process generally had classes that were more on-task, evidenced less disruption, and made greater progress through the problem-solving process than did those without clearly delineated objectives. As such, in future efforts, problem-solving facilitators should take care to fully explain objectives for each step in the process to properly orient students to their problem-solving tasks.

The teachers' styles ranged from highly structured to disarmingly loose, a situation that is probably true in any school setting. Our observations also suggest that in classes with teachers who were generally more structured, individual students participated more and were more accomplished in completing activities than were those with more loosely structured teaching. In fact, those classes that were loosely structured – especially where large group discussions were prompted without a specific focus – seldom got past the problem identification stage. Strong support exists, then, for teachers to be direct in shaping the context for problem solving, while leaving their students to work through the individual activities and steps.

Another variable that appears related to successful outcomes is student characteristics, especially academic ability. It

is reasonable to assume that cognitive skills are directly associated with the ability to complete the requirements of problem solving (Kenney and Watson 1989). That would appear to be true here as well since students in the school's advanced placement (AP) classes appeared to grasp the concepts more easily than did students in the lower level classes. In turn, they were also more likely to fully complete the four-stage process at least once. That is not to say that students with less academic ability cannot be taught to solve problems, but rather, as academic ability decreases, the need for teacher guidance, direction and structure increases. A good illustration of this comes from Teacher E, the first-year teacher who experienced considerable difficulty in implementing the program. Upon observing both her regular history and problem-solving classes, it was apparent that she had less control over her students. This teacher's lectures were poorly paced and she spent a great deal of time reprimanding students for their behavior. Coincidentally, the performance of students in each of her three classes was low. As such, more structure was probably required for these students from the beginning. Their need for structure is also evident by the general nature of their identified problems, which prevented them from going beyond problem identification. The same is likely true for Teacher B's students who had far more difficulty in advancing their broadly identified problems beyond the identification stage.

We anticipated that worksheets would be completed as guides for students as they progressed through the steps and stages. Some teachers were good at prompting students to complete their worksheets and assigning grades based on that work. Other teachers, however, lost track of the worksheets after the first stage and did not attend to them for the remainder of the project. It is not surprising that classes where worksheets were emphasized and grades assigned were more likely to complete all stages of problem solving. Worksheets are not only permanent products of each student's work, they are in a sense accountability logs. Those teachers that made students accountable for their work increased the likelihood that problem solving would occur. Although students complained at the

end of the project about having paperwork to complete, we believe that the worksheets were an important part of each student's responsibility for problem solving. In addition, they were perhaps the only means of evaluating their efforts.

Finally, we asked the project's teachers to be more facilitative than directive in their approach to working with the students on problem solving. It was felt that if teachers were prompted to direct the process, their role as classroom leaders would result in students' loss of ownership. However, in observing the interaction and the results at each stage of problem solving, it appears that the teachers could have been more direct without compromising the students' role in the process. For example, in some cases, classes made problem-solving decisions that teachers probably knew would be either fruitless (changing smoking regulations) or ill-advised. In such cases, it may have been preferable for those teachers to ask questions that would have led the students to reconsider their decisions or change direction altogether. Even though the students learned a great deal from their mistakes, it may have prevented some frustration on their part.

Probably the greatest balancing act between being directive and facilitative was demonstrated by Teacher F. She frequently asked questions (all the while knowing the answers but being careful not to give them to the students) that prompted the students to engage in appropriate discussions in order to reach acceptable answers. Teacher F was quite structured in her approach and remained very goal-oriented (after problems were identified, she set daily goals for completing steps), which seemed to propel the students through the problem-solving stages. These students maintained a high degree of interest throughout the program with one class solving a consensus school problem—a poor variety of food in the cafeteria. As we observed this class, we were impressed with how thorough the students were in their analysis, as well as by the various responses they brainstormed and then eventually implemented.

In the chapters that follow, the impact of the process on the students, their teachers and the school community in which both reside are examined.

WHAT WORKS? MEASURING THE IMPACT ON OUR STUDENTS

7

It has been said that all of us have the need to assume that our surroundings are safe. Indeed, the need to make sense of our surroundings can be so great that most of us tend to interpret unknown or threatening phenomena in terms that are more understandable and secure. Unfortunately, when either the perceptions or the reality of danger become too substantial to make such interpretations possible, our lives can become intolerable. Inevitably, the result of such circumstances is to make us increasingly suspicious of those around us and intimidated by our routine activities.

As we begin to feel that life around us is irrational or unpredictable, our assumptions of safety are destroyed. In their place, a sense of impotence emerges, which in turn only heightens our fears. From this, many have come to suggest that the degree to which we actually believe we have control over a situation may more directly affect our attitudes and responses than does our actual influence. If so, this may at least help to explain how many of us can become possessed by a fear of crime and physical assault while quietly accepting far more serious dangers in our everyday activities (Kenney 1987).

Perhaps no one is more influenced by fear than those who attend public schools. Nationally, both male and female students are afraid of attacks at school, where equal numbers report that they routinely avoid many places and facilities because of fear. Blacks, whites and students of other races such as Asians and Native Americans similarly fear such attacks, although black students (21%) report greater fear going to and from school than do white students (13%) or students of other

races (18%). Hispanics and younger students report the highest levels of fear, with 12-year-olds being twice as likely to avoid parts of their campus than 18-year-olds. Interestingly, students from low-income families, students who live in central cities and students whose families have moved twice or more during the previous five years each show the highest levels of fear as compared to their peers (Bastian and Taylor 1991). Regardless of a student's status, however, given the debilitating impact that even moderate levels of fear can have on the education process, if the School Safety Program accomplished little else, the potential for impact on classroom fear could be its most critical element.

Fear Among the Students

Similar to their peers nationally, by the end of the 1993-94 school year (the pretest period and official start of the program), nearly seven percent of the tenth grade class (n=259) at

Table 7.1
Pretest Measures of Student Fear

Students who:	West Meck High *(Test School)*	Garinger High *(Control School)*
"almost never" feel safe at school	7%	5%
"almost always" feel safe at school	54	60
are "almost always" afraid that someone will hurt or bother them at school*	11	6
are "almost always" afraid that someone will hurt or bother them on the way to school	5	6
have had to fight at school this term**	22	16
have seen a teacher threatened by a student	51	53
have seen a teacher hit or attacked by a student	18	15

* Significant at .01 ** Significant at .05

West Mecklenburg High School (West Meck) reported that they "almost never" felt safe while in their school building. At the opposite extreme, only slightly more than half (54%) reported "almost always" feeling safe. As such, at least 45 percent of these students were concerned for their safety at least sometimes while they attended school. Students from the project's comparison school (Garinger High School) felt only slightly safer.

When asked to explain their fears further, more than 11 percent of the West Meck tenth graders added that they were "almost always" afraid that someone would hurt or bother them while at their school. Another 35 percent experienced similar fears of harassment some of the time and more than one-fifth were fearful while on the way to and from school as well. To support those concerns, 22 percent reported that they had had to fight to protect themselves during the current school term. Perhaps worse, over half had seen a teacher threatened by a student and more than 16 percent reported seeing a teacher actually hit or attacked. While many students may have witnessed and reported the same or only a few student-teacher conflicts, the impressions of disorder were obviously considerable at the time of the project's pretest.

As they described the impact of fear on their behaviors, more than one-fourth of the West Mecklenburg students reported that they "usually stay away from" school restrooms out of fear that someone might hurt or bother them while there. For the same reasons, 23 percent made efforts to avoid parts of the school's cafeteria, one-fifth avoided hallways and stairs in the school, and nearly as many (20%) mentioned "other places inside the school building" to be avoided as well. Nor were the paths to school much less frightening since 16 percent reported that they usually chose not to take the shortest way to school out of fear, 14 percent were afraid to use school entrances, and 26 percent noted "other places on the school grounds" to be avoided as well. With these results, the focus of so many of the student problem-solving groups on these same crowded school locations should probably have been anticipated.

Table 7.2
Pretest Measures of Student Reactions to Fear

Students who "stay away" because of fear from:	West Meck High *(Test School)*	Garinger High *(Control School)*
school restrooms*	27%	12%
parts of the school cafeteria*	23	12
hallways or stairs*	20	12
other places inside the school building*	20	11
the shortest way to school	16%	12%
any entrances to the school	14	11
other places on school grounds*	26	15

* Significant at .01

Individually, some differences in student fear that could be attributed to race and gender were found. For example, at the project's outset, males were significantly more likely to have fought with others and to have been suspended during the previous school term than were female students. While we have no way of knowing when or where these conflicts occurred, 34 percent of the males (and 21% of the females) advised that they attempted to stay away from school restrooms whenever possible. Male respondents during the initial data collection were also considerably more fearful that someone would hurt or bother them on the way to school.

Similarly, black students were significantly more likely than whites or students of other races to have fought or been suspended from classes during the previous school term. While black males were generally most inclined to fighting (37%), even black females reported higher rates of fighting (28%) than either white males (23%), males of other races (27%), females of other races (14%) or white females (11%). Likewise, nearly 31 percent of black West Mecklenburg High School students surveyed during the project's first wave of data collection reported being suspended during the previous term as opposed to only 10 percent of similar white students.

While engaged in fewer school conflicts, white students, especially females, nonetheless expressed a greater desire to avoid the fear-producing locations on campus than other students. For example, where nearly one-third of whites reported that fear caused them to stay away from school restrooms and other outside places on the school grounds, fewer than 20 per-

Table 7.3
Comparisons of Student Fear and Fear Response at West Mecklenburg High
(Pretest results by percent)

	Black		White		Other	
West Meck students who	*Male* (N=41)	*Female* (40)	*Male* (77)	*Female* (75)	*Male* (11)	*Female* (14)
had to fight this term	37%	28%	23%	11%	27%	14%
were suspended from school[F]	32%	30%	17%	4%	27%	7%

	Black		White		Other	
Stay away from out of fear:	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*
entrances into school	22%	5%	12%	17%	18%	14%
hallways and stairs in school[F]	29%	5%	21%	24%	27%	14%
cafeteria	29%	28%	27%	17%	0	14%
school restrooms[F]	24%	8%	40%	29%	27%	14%
other places inside school	24%	10%	20%	25%	9%	14%
other places on school grounds	24%	12%	31%	31%	27%	14%

	Black		White		Other	
Students who:	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*
Almost **never** fear being hurt or bothered at school[M]	66%	72%	42%	48%	54%	57%
Almost **always** feel safe while in their school building	54%	52%	48%	65%	64%	43%

[F] Differences among females significant at .05 [M] Differences among males significant at .05

cent of blacks made similar efforts. Despite these attempts to avoid conflict locations, however, the white students surveyed remained significantly more concerned that they would be hurt or bothered while at school. Whether the differences in fighting are caused by, or result from, these differing levels of student fear is not known.

Finally, while students who had fought with others, seen teachers threatened or been suspended during the previous school semester reported somewhat lower levels of overall satisfaction with school, the differences between these and other students were not statistically significant.

The Role of School Peers

Despite their concerns for safety, students generally agreed that their peer associations at West Meck High were quite positive. While most students agreed that most of their friends considered school to be something of a pain, females, black students and students who were both satisfied with their own school performance and believed that they worked hard at school were least likely to have friends with negative school views. Conversely, males and those students who considered themselves least satisfied with school and the least hard working were far more likely to report having friends who belonged to gangs and who got into trouble with the police. Male students were also significantly more directly exposed to negative peer influences, noting more often than females that their friends try to get them to do things that their teachers don't like.

Interestingly, while only 6 percent of the West Mecklenburg students had a best friend who belonged to a gang (also suggesting at least gang association on their own part), those who did reported both different levels of school fear and somewhat sharper reactions to it. Perhaps not surprisingly, those with a gang connection were more likely to have fought during the school term while more than half – as compared to fewer than 16 percent of other students – reported a recent school suspension. Over 73 percent of those with gang-associated friends witnessed a teacher being threatened by a student during that same school term.

Table 7.4
Student Peer Associations
(Students Responding "True")

		West Meck	Garinger
Most of my friends think that school is a pain:	Females	59%	63%
	Males	69	67
	Black	54	55*
	White	68	78
	Other	68	80
	Satisfied with school	44*	40
	Work harder at school than others	41	42
My friends often try to get me to do things the teacher doesn't like:	Females	5%*	9%*
	Males	28	32
	Black	18	16
	White	17	22
	Other	8	30
	Satisfied with school	11	13
	Work harder at school than others	8*	11
My best friend belongs to a gang:	Females	3%	6%
	Males	8	10
	Black	4	5
	White	7	7
	Other	8	19
	Satisfied with school	3	4
	Work harder at school than others	3*	4
My best friend gets in trouble with the police:	Females	7%	9%
	Males	13	16
	Black	11	11
	White	9	9
	Other	12	23
	Satisfied with school	6	7
	Work harder at school than others	6	7

*Significant at .01

While the gang-associated students expressed no greater fear that someone might hurt them at school, more than 20 percent did acknowledge that they "almost never" feel safe while in the school building. Only 6 percent of the non-gang students felt similarly. In turn, those with friends in a gang expressed somewhat higher concerns while on the way to or from school and were significantly more likely to avoid the shortest way to school out of fear. "Other places on the school grounds" were also often mentioned as places to stay away from to avoid being hurt or bothered. Only in the cafeteria, where they are presumably in the company of their friends, did those students with gang connections appear more secure than their non-gang peers. Care in interpretation should be exercised, however, since the actual number of students reporting gang affiliated friends was surprisingly small (Wave 1, N=15).

What Results from the Problem-Solving Efforts?

Once the student-led problem solving progressed to the analysis and intervention stages, the impact of the process became quickly apparent. While Chapter Six details how that participation appeared to vary depending upon teaching style, classroom structure and student academic ability, a reasonably high degree of interest from each of the groups was observed both initially and throughout the project. Anecdotally, perhaps the positive impacts were most obvious near the end of the project year when a schoolwide conflict emerged after students left campus without permission to prepare for their Friday night prom. Once many students realized that they had exceeded the maximum absences allowed—a condition that would lead to their suspension from school—several of the problem-solving students took the lead to negotiate an acceptable settlement with the school's administration. Eventually, it was agreed that each student's absence would remain unexcused; however, none of those absences would be applied to the school's "five and you are out" rule. Although

not a part of the project's focus, these students allowed a more hostile situation to be avoided (as had occurred two years earlier after a similar incident led to a student walk-out) by providing alternatives acceptable to everyone. To the project's teachers, the students' actions affirmed that the problem-solving approach and sense of empowerment had been incorporated by the students into their everyday lives.

The Impact on Fear

A positive impact on fear was apparent from the data as well. Recall that where substantial levels of fear existed among students during the project's initial data collection (May 1994), by the second (December) and third (May 1995) data waves, significant reductions had occurred. For example, while little more than half of the West Mecklenburg High students were almost never afraid of being hurt or bothered at school as tenth graders, by December—after much of their problem analysis had occurred—nearly 70 percent felt so. By the project's completion, three-fourths were almost never afraid, with most of the improved feelings of safety occurring among those who had been most fearful—white students, males, and students whose best friends were neither gang members nor regularly in trouble with the police. In general, as they examined their school's safety issues, these students reported at the end of the project that it became significantly more likely that they would almost always feel safe while on campus.

Similarly, while male students had previously been significantly more fearful while on the way to school, they, and white students generally, had reduced their concerns considerably following their problem-solving activities. In both cases, these students actually became the least fearful while traveling to and from school. Where both had more often avoided the shortest route out of fear, as the project progressed each became significantly less likely to do so. Interestingly, as those students with no gang connections grew increasingly secure while traveling the shortest way to school, those claiming a best friend who

gets in trouble with the police became considerably more fearful. Meanwhile, no significant differences on any of these items were found among Garinger High students, suggesting that the results were not due to student maturation.

Beyond simply getting to school, as the problem-solving progressed, male students grew increasingly secure on the grounds surrounding the school as well as in the school build-

Table 7.5
Student Fears in School
(West Mecklenburg High)

of being hurt or bothered at school:	**May 1994**	**Dec. 1994**	**May 1995**
	(% Responding "Almost Never" Afraid)		
Males*	51%	74%	80%
Females	57	65	68
White*	45	67	70
Black	69	75	78
All Students*	54	69	74
of being hurt or bothered on the way to school			
Males*	75	83	89
Females	84	86	83
White**	82	89	91
Black	78	77	79
All Students	80	84	86
Feel safe while in the school building			
	(% Responding "Almost Always")		
Males**	51	62	68
Females	59	61	64
White**	57	61	74
Black	53	60	57
All Students	55	62	66

*Significant at .01 **Significant at .05

ing's hallways and stairs, cafeteria and restrooms. White students as a group grew significantly less fearful while in restrooms and other interior settings while blacks reported greater levels of comfort on the school grounds outside and in the cafeteria. At each school location, students who denied having gang-affiliated friends reported reduced fear while those with friends who had not experienced trouble with the police felt safer in the cafeteria, restrooms, and other gathering spots both inside the school building and on school grounds.

Not only was the fear at specific school locations reduced consistently by about one-third, but actual incidents appear to have declined as well. While more than one in five students reported having to fight to protect themselves during the last school term in 1994, fewer than one in ten did so one year later in the final term of 1995. The improved behavior was nearly universal. White students, black students, males and those students without friends in gangs all experienced self-reported reductions in fighting of at least 50 percent. Students who believed that others in the school saw them as either a good student or as very successful were also significantly less likely to fight at school during the current term. As expected, at each of the three data collection points, those students who reporting fighting felt safe in school less often, were more fearful of being hurt or bothered, and were more fearful while on the way to and from their school.

Similarly, the number of students who reported having seen a teacher threatened by a student declined by a third while those who reported witnessing a physical attack on a teacher dropped by more than half. As before, these improved perceptions of school order were broad-based; only those students who felt that others perceived them poorly did not report seeing fewer teacher-student conflicts. Because Garinger High students reported no differences in fear, as well as increases (though not statistically significant) in reported incidents over the same time periods, it is likely that the changes observed at West Mecklenburg do relate to the School Safety Program (see Appendices for Garinger High data).

Table 7.6
School Locations to Avoid – West Mecklenburg High
(Percent Who Stay Away Out of Fear)

Males:	May 1994	Dec. 1994	May 1995
The shortest way to school**	18	13	8
School cafeteria*	25	13	12
School restrooms*	34	19	17
Hallways and stairs**	24	13	15
Other places on school grounds*	28	15	14
Whites:			
The shortest way to school*	14	6	5
School restrooms*	35	24	19
Other places inside the school**	22	14	13
Blacks:			
School cafeteria*	28	13	11
Other places on school grounds**	18	9	7
About Best Friend:			
Without Gang Affiliation			
The shortest way to school**	15	10	7
School restrooms*	27	18	15
Other places inside the school*	19	11	10
Other places on school grounds*	25	16	15
Without Police Trouble			
The shortest way to school*	15	10	6
School restrooms*	27	19	14
Other places inside the school *	20	10	12
Other places on school grounds*	25	16	14
All Students:			
School restrooms*	27	19	16
Other places inside the school**	20	12	13
Other places on school grounds*	26	17	17

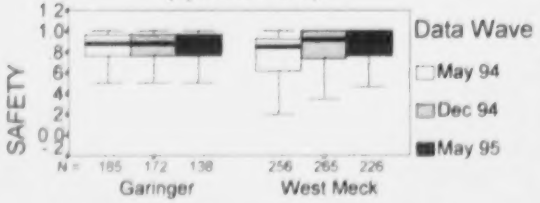
*Significant at .01 **Significant at .05

Given these improvements on individual fear and safety items, it was hardly surprising that the overall levels of fear and perceptions of school safety among the participating West Mecklenburg students improved significantly as the program progressed. By combining the relevant fear and safety items to construct a student safety scale (Gottfredson 1991) it becomes possible to see not only improvements in the students' feelings of safety but reductions in the variability of their views as well. For example, figure 7.1 provides a box-plot comparison of the

Figure 7.1

Student Safety Scales

(by Data Wave)

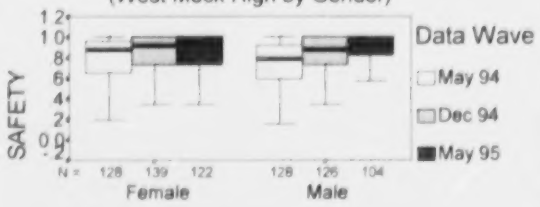


f = 10.898 (West Meck High). Significant at .01

Figure 7.2

Student Safety Scales

(West Meck High by Gender)



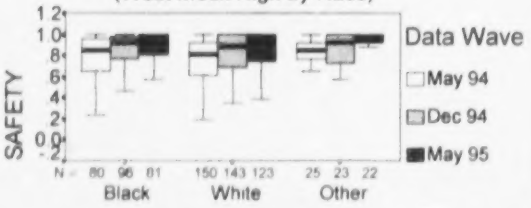
f = 9.627 (Males). Significant at .01

student safety scales for both schools at each time frame. After combining the 13 relevant individual items to produce a safety score scaled from between 0 (fearful) and 1 (not fearful), the box-plots that follow offer the median score boxed by the 25th and 75th percentiles (the central 50% of data values). The range of values (not including outliers) are shown by the brackets around each box. While few differences can be seen in the views of Garinger High students, the range, variability and median scaled scores clearly improved steadily at West Mecklenburg High such that by the project's end the differences be-

Figure 7.3

Student Safety Scales

(West Meck High by Race)

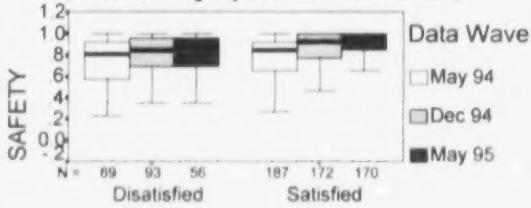


f = 3.596 (Black), f = 6.153 (White), Significant at .05

Figure 7.4

Student Safety Scales

(West Meck High by Satisfaction with School)



f = 10.538 (Satisfied), Significant at .01

tween the schools were no longer significant. Figures 7.2 through 7.4 compare the scaled student safety responses for West Mecklenburg High students by gender, race and overall satisfaction with school performance.

Crime on the Campus

In addition to the fear and victimization survey results, data on calls for service and crimes reported to the Charlotte-Mecklenburg Police Department were made available for the project's impact analysis. While the problems of unreliability of reported crimes have long been recognized, their availability, when coupled with the near absence of systematically collected crime and disciplinary data at the school level, virtually requires that they be used. In addition, given the public school

Table 7.7
Incidents Requiring Police

	West Mecklenburg High		*Garinger High*	
	1993-94	1994-95	1993-94	1994-95
Robbery	0	0	3	4
Assault/Aggravated	**5**	**0**	**1**	**6**
Assault/Other	**26**	**5**	**11**	**18**
Burglary	4	1	8	7
Theft/Vehicle	**3**	**5**	**8**	**10**
Theft/Other	11	2	6	9
Auto theft	0	0	1	1
Arson	0	0	2	5
Vandalism	9	4	15	10
Indecent exposure	0	1	0	0
Other order maintenance	**42**	**35**	**26**	**25**
Total Incidents	100	53	81	95

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setting, it seems reasonable to believe that the weaknesses of reported crime statistics in this instance are less troublesome for measurement than for other areas. This is the result of three important factors.

First, since the victims of most school crimes are almost always either the school itself, its employees (who must account for school equipment), or children whose care has been assigned to the school system and its teachers, it is probable that at least among certain types of incidents there is a high degree of reporting. Second, when crimes or other incidents do occur, the physical confines aid in reporting since the school structure soon directs the victim to a location where reporting is convenient while fear, anger and other motivating emotions are still high. Third, most school staff agreed (83%) that the school has established policies for most disciplinary problems and that those rules are understood and followed by both teachers and administrators (64%). If so, not only are outlets for reporting more readily available than in other settings, but established procedures directing when and how reporting is to occur also offer clear guidelines and incentives to staff.

Examining the calls for police service data in table 7.7, one cannot help but be at least somewhat surprised by the regularity of police activity on campus. During the 1993-94 school year (the last full year prior to the School Safety Program), the police were called 80 to 100 times to each of the project's campuses to respond to incidents as varied as robberies, burglaries, indecent exposure and possession of drugs. This amounts to nearly one incident for every two days that school is in operation. During the project year (1994-95), however, while incidents at Garinger High increased, West Mecklenburg High experienced a reduction by nearly half. Even better, the most significant reductions occurred among assaultive behaviors, indicating that the conflict levels on campus had been significantly lessened. These findings would appear to support the earlier victimization survey data.

Beyond the police data, in-school disciplinary actions at West Mecklenburg High declined as well. Table 7.8 shows sub-

stantial reductions in student conflicts and fighting with an overall reduction of more than 23 percent in the number of students disciplined. In fact, when actions for classroom tardiness and possession of pagers and cellular telephones are removed from consideration, the reduction for student offenses during the project year is nearly 51 percent. Again, however, caution is appropriate since the overall rates are low, the decision to take action is subjective and the full range of comparison figures from Garinger High School were not available.

Although official disciplinary data is difficult to interpret, when the students' own views of the discipline they received are included, a more clear picture emerges. While there were no measurable changes in either school's use of rewards or ex-

Table 7.8
Suspensions for School Violations

	West Mecklenburg High		*Garinger High*
	1993-94	1994-95	1994-95
Student/Student conflicts	**17**	**5**	**9**
Student/Teacher conflicts	**17**	**11**	**31**
Tardy	19	29	17
Cutting class/Loitering	6	2	18
Theft	4	3	NA
Drugs/Alcohol	3	3	3
Weapons	0	2	1
Chronic disruption	**6**	**2**	**1**
Fighting	**11**	**4**	**1**
Cheating	1	0	0
Pager/Cell Phone	0	3	0
Total Incidents	84	64	81

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tra assignments as inducements to behave, when asked about after-school detentions the West Mecklenburg students reported being significantly less likely to have received this punishment by the project's end than at its inception. The use of detentions for female students, for example, fell from nearly 16 percent during the month preceding the end of the 1993-94 school year, to only 4 percent in the month prior to the 1994-95 school closing. Similarly, black students receiving detentions fell from over 27 percent to only 5 percent.

The Impact on School Performance

While crime and fear have obvious links to school performance, other factors stand out as well. At the national level, parents, school bureaucracies and even genetics are variables often considered by proponents of various reforms, though most recently a student's peers and peer associations are receiving perhaps the hardest look. Steinberg, Dornbusch, and Brown (1992), for example, concluded from surveys in nine public high schools that students with equivalent grades entering a school, but with more "academically oriented" friends, did better over the course of their school careers. Conversely, those who gravitated to delinquent friends were themselves more likely to get into or cause trouble. While the School Safety Program only loosely addresses academic performance, it is squarely concerned with peer associations.

The Significance of School Friends

Recall that while only slightly more than six percent of West Mecklenburg High's students (8% of Garinger's students) reported having a best friend who belonged to a gang, nearly half (44%) had at least one friend who had been picked up by the police. While the peers they associated with changed little during the project year, to a point students with more deviant friends appear to have benefited the most from the problem-solving efforts. For example, those students reporting at least a few friends who had been in police trouble expressed the most significant reductions in fear overall. In fact, white students

and females in these categories reached levels nearly comparable to students whose friends had little police contact.

Beyond school fear, other improvements that could be associated with a peer relations were observed, although these re-

Table 7.9
Student Friends and View of Self
(West Mecklenburg High)

Number of friends picked up by police:	May 1994	Dec. 1994	May 1995
Unknown	22%	16%	20%
None	34	29	36
One or a few	36	46	36
Many or most	8	9	7
Students satisfied or very satisfied with school:			
No friends picked up by police	81%	74%	84%
One or a few picked up by police	65	65	74
Many or most picked up by police	67	40	41
Others see you as a very good student:			
No friends picked up by police	65%	69%	63%
One or a few picked up by police	42	50	56
Many or most picked up by police	19	32	12
Others see you as very successful:			
No friends picked up by police	57%	61%	62%
One or a few picked up by police	44	45	48
Many or most picked up by police	33	36	18
Students who expect to finish college:			
No friends picked up by police	73%	69%	69%
One or a few picked up by police	60	60	65
Many or most picked up by police*	43	20	24

* Significant at .00

sults are far more difficult to interpret. For example, when asked how they felt about school itself, those students with only one or a few friends who had been picked up by police reported a steady improvement in their levels of satisfaction over the project's three consecutive data periods. Those who claimed that most or all of their friends had been in trouble, however, reported a substantial worsening of attitude - from 33 percent who were either dissatisfied or very dissatisfied with school, to over 58 percent who felt so by year's end. Interestingly, for both groups, virtually all of the change in attitudes can be found among white students, especially males.

Mixed results were also found in the students' perceptions of how others might see them. For example, when asked if others see them as either a good student or as someone who is successful, as the project progressed those students who knew of either no friends or had only one or a few friends who had been picked up by the police increasingly answered that they were perceived as very good or very successful. Those with many friends who had been in police trouble, however, became even more likely to imagine that others only saw them as only "somewhat," or even "not at all" successful or good as a student. Unfortunately, their perceptions may have been grounded in fact as well, since students with more friends who had been picked up by the police reported being significantly less likely than other students to finish their homework and less likely to deny that they "don't bother with homework or class assignments." Not surprising, these students had parents with less education than others and had significantly lower expectations that they themselves would complete either high school or college.

The Value of Education

It is hardly a surprise that students whose friends get in trouble confront far more negative influences than those whose do not. While 94 percent of students whose friends have not been arrested report that their peers consider getting good grades to be important, less than half of those with many friends in trouble felt similarly. Worse yet, by the end of the school year, only a

Table 7.10
Student Perceptions of Their Friends
(Percent of West Mecklenburg students responding "True")

	May 1994	Dec. 1994	May 1995
Most of my friends think getting good grades is important			
No friends picked up by police	91%	99%	94%
One or a few picked up by police	77	80	85
Many or most picked up by police	57	60	35
My friends try to get me to do things the teacher doesn't like			
No friends picked up by police	6%	5%	11%
One or a few picked up by police	20	20	18
Many or most picked up by police	43	46	47
My best friend is interested in school			
No friends picked up by police	92%	90%	88%
One or a few picked up by police	65	72	69
Many or most picked up by police	43	40	24
My best friend plans to go to college			
No friends picked up by police	92%	92%	95%
One or a few picked up by police	80	76	80
Many or most picked up by police	62	60	41

third of students with the most friends in trouble still believed that their friends continued to care about grades or school performance—a significant decline from the 57 percent who assumed so earlier. Meanwhile, nearly half of those same students reported that school was not important, and their friends try to get them to do things that their teachers won't like. Fewer than one-tenth of those without friends in trouble, and 20 percent of those with only one or a few such friends, confronted such negative influences.

As for their best friend, students with the least deviant peers were the most certain that their closest associate was interested in school. More than 95 percent reported that their

best friend attended class regularly, and an equal number noted that he or she planned to go to college. For those with friends who had nearly all been in trouble, however, their perceptions of their best friend's interest in school declined from the early estimate of nearly 43 percent to fewer than 25 percent at year's end. Likewise, these students noted that collectively only a little more than half their best friends attended class regularly, while their best friend's plans to attend college declined from nearly 62 percent to only 41 percent. For each of these items, those students with only one or a few friends who had been picked up by the police were more similar to those with no friends who had been in trouble. Table 7.10 compares students' views of their peers. By comparing the trends in responses, we can see that while the differences between students were significant, the impact from the School Safety Program on the importance and value of school performance appears to have been quite limited.

Students' Own Views of School

Although their perceptions of their friends changed little during the project year, students' own views of school - and their friends' influence on those views - changed considerably. For example, while most students generally did not feel that they were "treated like children" at school, those with friends more often in trouble were significantly more likely to express that criticism. Whether those views were a simple matter of perception or were an accurate recognition of a less trusting atmosphere than that experienced by other students is, of course, un-

Table 7.11
"Students Are Treated Like Children Here"
(West Mecklenburg students responding "Almost Always")

	May 1994*	Dec. 1994	May 1995
No friends picked up by police	6%	14%	14%
One or a few picked up by police	25	20	21
Many or most picked up by police	43	36	29

* Differences between groups are significant at .001

Table 7.12
Student Views of West Mecklenburg High School Rules

Everyone knows what school rules are:	May 1994	Dec. 1994	May 1995
(Percent Responding "Almost Always")			
Females	70%	74%	82%
Males	63	64	70
Black	68	68	75
White	66	67	77
Other	64	83	77
The school rules are fair:	**May 1994**	**Dec. 1994**	**May 1995**
Females	22%	19%	26%
Males	17	20	27
Black	17	15	13
White*	23	23	36
Punishment for violations is the same:	**May 1994**	**Dec. 1994**	**May 1995**
Females	37%	34%	28%
Males	37	29	33
Black	31	30	28
White*	42	32	31
No friends picked up by police	44	39	33
One or a few picked up by police	33	27	30
Many or most picked up by police	29	24	29
Students can get unfair rules changed:	**May 1994**	**Dec. 1994**	**May 1995**
Females*	3%	7%	13%
Males	6	8	10
Black**	8	6	11
White*	3	8	11
(% Responding "Almost Never")			
No friends picked up by police	66	53	56
One or a few picked up by police*	78	63	47
Many or most picked up by police	71	80	71
Unknown if friends were picked up*	78	62	33

* Significant at .01 ** Significant at .05

Table 7.13
Student Roles in School Governance
(Percent of West Mecklenburg High Students Agreeing)

Students have little say in running the school:	May 1994	Dec. 1994	May 1995
No friends picked up by police	48	51	49
One or a few picked up by police	60	58	48
Many or most picked up by police	71	64	53
Students can't help solve school problems:	**May 1994**	**Dec. 1994**	**May 1995**
White**	48%	40%	34%
Females	48	39	34
No gang associated friends*	51	40	39
No friends picked up by police	43	35	40
One or a few picked up by police*	59	44	35
Many or most picked up by police	43	56	71
Students help make school rules:	**May 1994**	**Dec. 1994**	**May 1995**
No friends picked up by police*	19	26	41
One or a few picked up by police	21	27	24
Many or most picked up by police	10	20	24

* Significant at .01 ** Significant at .05

known. As the school year progressed, however, it is interesting to note that the differences in the views of each group grew increasingly smaller. By year's end, in fact, those differences no longer even approached a level of statistical significance, suggesting that teacher responses to students may have grown more consistent as the students from all groups collaborated on the problem-solving efforts.

As for their school's rules, while the majority of students acknowledged that everyone knew them, far fewer were agreed that they were either fair or that they were evenly applied. In fact, as the project year continued, black students who had no friends in police trouble and nearly all white students came to consider the administration of punishments to be considerably less equal than they had at the start of school. Fortunately, however, all but those students with many friends who had been in trouble with the police also grew significantly more cer-

tain of their own ability to get unfair rules changed. This optimism about their own influence was especially true of black students who were unaware of any friends who had been picked up by police, and whites who reported having only one or a few such friends. Table 7.12 displays the trends in the students' views of school rules.

Along with added confidence in their abilities to impact existing rules, many students grew increasingly sure of their influence in more general ways as well. For example, when asked about student government, 70 percent of students with friends who had not been in police trouble agreed that this legislative body made important decisions. Fewer than half of those with more deviant friends agreed. As the project progressed, however, those students with friends in previous trouble began to change their views until, by year's end, they mirrored those with more positive peers. A similar shift in rejecting the idea that students have little say in how their school is run was observed; however, in this instance, by the end of the project year students had become only evenly split on a statement to that point.

Perhaps most directly related to the project's goals, students were asked about the extent to which they were asked to participate in solving problems their school might be having. While evenly split on the question initially, as their problem-solving progressed, white students, students who believed that they worked harder than their peers, students whose friends were not involved with gangs and students with only one or few friends who had been picked up by police grew considerably more convinced of their role in solving school problems. Meanwhile, students with many friends who had had police contact became less sure of their role, with more than 70 percent agreeing by the project's conclusion that they were seldom asked to help with school problems. While few students felt that they and their peers could actually help to make school rules in the first place, those whose friends had not been in police trouble became increasingly divided on the question as their problem solving took place. Finally, students with only one or a few friends who had been in trouble with the police

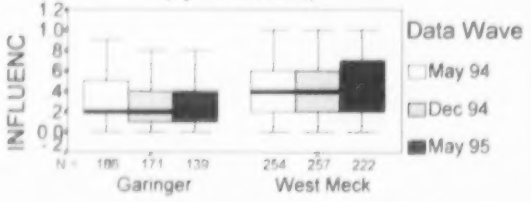
also grew significantly more likely to report that they liked school, the principal, their teachers and, perhaps most important, that they felt that they "belong" in the school.

Once again, the overall improvement in student views can be seen by combining the five relevant individual student influence items to construct a student influence scale (Gottfredson 1991). Once combined, an overall perceived influence score from between 0 (no influence) and 1 (considerable influence) can be produced to permit comparisons between the schools and student groups.

Figure 7.5

Student Influence Scales

(by Data Wave)

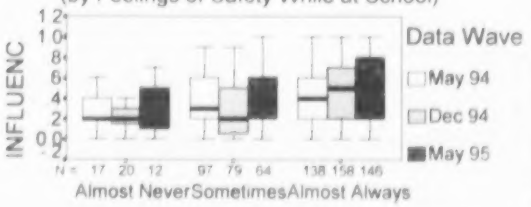


f = 7.04 (West Meck High), Significant at .001

Figure 7.6

Student Influence Scales

(by Feelings of Safety While at School)



f = 4.245 (Almost Always Safe), Significant at .01

As figure 7.5 shows, the West Mecklenburg High students began the project school year with higher expectations of their own influence than did their Garrison High peers ($t = 2.596$, $p < .01$) and grew even more confident by year's end. While females, whites and students who were satisfied with their school performance each reported significant increases in their perceptions of their influence in school decision-making, figure 7.6 makes the association between student fear and feelings of influence especially obvious. Since the School Safety Program was designed specifically to address each of these student attitudes, we believe this to be important evidence of the program's success.

Views of Themselves

Finally, as the students progressed through their problem-solving efforts, we were interested to see what impact the added responsibility, more varied peer contacts and reinforcement of their own influence might have on their self-images. For example, while almost all students initially declared that they were the kind of person who can make it if they try, those whose friends were more often in trouble became somewhat less confident as the year continued. Unfortunately, they also grew significantly more likely to agree that they have little to lose by causing trouble at school. As indicated earlier, however, that view does not appear to have translated into action since they, along with most other students, were far less likely to cause trouble toward the end of the program.

While students with the most negative peer influences saw little self-advancement, the school's female students increasingly came to realize the personal costs for their misbehavior at school. In addition, when asked if people who leave things around deserve to become victims of theft, West Meck's girls, and white students generally, became significantly less likely to agree. Black students, meanwhile, more often rejected the idea that taking things from stores harmed no one. Similarly, as the project year progressed, the school's black students became more inclined to see themselves as the kind of person that one would not expect to be in trouble with the law.

Conflicts, Fear and the School Community

From the measures of student fear, self-reported incidents of conflict and measures of project impact, a picture of students emerges that is somewhat different than was initially expected. Much of recent school literature suggests that black students and other minorities experience school in less positive ways than their white peers, and, indeed, from the School Safety Program data that would appear to be so at West Mecklenburg High. Black students, both males and females, were significantly more likely to have fought with others and been suspended from school than were students of other races. So too, blacks report that they were far more likely to have been sent from class as punishment during the previous month and were more likely than whites to have the perception that their grades had been lowered as punishment. Still, no differences were found in how satisfied black and white students were with their school work, how hard they believed they worked at school or how successful they believed their friends saw them as being. Even so, black students (and males generally) were significantly less concerned with their teachers' opinions of them.

While blacks at West Meck appear more confrontational, males of both races had the highest levels of fear and were the most impacted by the project. For example, not only were males more fearful than females of being hurt or bothered while at school, on the way to school, and while in the school building, they were also significantly more likely to avoid most interior locations where conflicts can occur. Similarly, white students reported avoiding school restrooms and other gathering places outside on the school grounds, while blacks stayed away from the cafeteria and other interior locations. Interestingly, however, while real reductions in incidents were observed, it nonetheless appears that the actual dangers at each of these locations is insufficient to support the levels of fear produced. As such, as the project progressed, each group grew significantly less fearful and more comfortable in specific locations of concern, leaving us to conclude that a large portion of the expectations of danger on campus result from factors other

than actual incidents. These factors may include popular wisdom, student biases and concentration of others unlike themselves, leaving each group with an unpleasant sense of defenselessness. If so, the process of discussing ones' fears with others, learning of similarities of concerns between groups and examining the extent that real dangers do occur may be sufficient to realign the reality and perceptions of risk. The end result, especially when coupled with student-initiated solutions to specific problems, is a safer campus with a lessened sense of disorder.

Relations with Peers and the Impact on Self

As for their peer relations, the School Safety Program appears to have had the greatest impact on students potentially in transition. While better students appeared to be both better problem-solvers and less likely to have friends who had been in trouble, they were least impacted by the project's exercises. Conversely, those whose friends had almost all been in some form of police trouble actually grew less satisfied with school, had reduced expectations of the future and a diminished impression of themselves as the project year progressed. How they might have responded without the project is, of course, unknown. However, in light of even more negative trends among the comparison school's students, we believe that the program's effects are simply inadequate to reverse the various, far stronger influences these students confront. It is, however, important to remember that these students too reported reduced levels of fear, conflict and deviance while at school.

Most pronounced were the effects on students with varied peer relations – some troubled, some not. Still open to outside influences, these students experienced increased satisfaction with school, an increased sense of their own role and relevance in the direction of their community, and overall improvements in their images of themselves. If this is so, then we believe that the student-led problem-solving process has contributed significantly to their future well-being.

8

WHAT WORKS? CRIME, FEAR AND TEACHER SATISFACTION

Much has been made of the students' fear while in or on the way to school. While understandably the main focus of concern, personal safety while at school is not an issue for students alone. In fact, by the end of the 1993-94 school year, more than 28 percent of the West Mecklenburg High School's teachers reported that vandalism, personal attacks and theft were at least "fairly much" a problem to them as well. More specifically, nearly one in five reported that they had personally been the victim of damaged personal property; 16 percent had experienced a theft of personal property worth more than $10; and seven percent had been physically attacked, though not seriously enough to require a doctor. Anticipating the potential for problems, two-thirds of these teachers reported that they had received obscene remarks or gestures from students during the past month while more than one-third were directly threatened in remarks by students. In evaluating their school environment, at least 12 percent of the West Mecklenburg teachers felt either very or fairly unsafe during school hours in their school's hallways and stairs, cafeteria, locker rooms and gym and parking lots. More than 19 percent had similar fears when in restrooms used by students, while eight percent expressed feeling very unsafe or fairly unsafe in their own classrooms while teaching. Although initially West Mecklenburg High staff appeared to have experienced slightly higher rates of victimization, as table 8.1 shows, their concerns for personal safety were comparable in most regards to their counterparts at Garinger High. While the School Safety Program addressed the concerns of students more directly than those of the faculty, as the school climate improved, we anticipated benefits to the West Mecklenburg High School teachers and staff as well.

Table 8.1
Measures of Teacher Fear

Teachers who feel "very" or "fairly unsafe"	West Meck High *(Test School)* N=91	Garinger High *(Control School)* N=90
in their classrooms while teaching	8%	9%
in the hallways and stairs	12	6
in the cafeteria	10	14
in restrooms used by students	19	20
in locker rooms or the gym	10	7
while in the parking lots	10	16

Teachers who personally experienced	West Meck High *(Test School)*	Garinger High *(Control School)*
damage to personal property worth more than $10**	19%	7%
theft of personal property worth more than $10	16	9
theft of personal property worth less than $10	24	16
physical attack by a student (doctor not required)**	7	1
obscene remarks or gestures from a student	65	52
threats in remarks from a student	36	31

** Significant at .05

Fear Among the Teachers

While the overall levels of fear among West Mecklenburg teachers were generally high, whites and, to a lesser extent, female staff and teachers with the least experience appear to have had the greatest apprehensions. For example, while nearly one-fourth of the school's white faculty reported feeling at least fairly unsafe in restrooms used by students, only one of 27 black teachers felt the same. Similarly, at least 17 percent of the white staff expressed being afraid in hallways and on the stairs, and nearly one in five felt unsafe while in empty classrooms, the cafeteria, or in locker rooms or the gym. None of the school's black staff, however, reported any apprehensions about any of those locations. Nearly 10 percent of whites (compared to a single black male), added that they felt unsafe while in the school parking lot, elsewhere on school grounds and even in their own classroom while teaching. Meanwhile, female staff expressed the greatest concerns about time spent in

Table 8.2
Teacher Assessments of Personal Safety
at West Mecklenburg High
(Percent responding either "very" or "fairly" safe)

	Sex		Race	
	Males	*Females*	*Black*	*White*
In their own classroom while teaching:	76	81	79	78

Low Ability			Behavior Problems**		
<10%	*26-50%*	*>51%*	*<10%*	*26-50%*	*>51%*
94	83	60	93	56	42

	Sex		Race	
	Males	*Females*	*Black*	*White*
In empty classrooms:	75	65	79	65

Low Ability			Behavior Problems**		
<10%	*26-50%*	*>51%*	*<10%*	*26-50%*	*>51%*
75	75	47	79	50	43

	Sex		Race	
	Males	*Females*	*Black*	*White*
In hallways or stairs:	59	60	75	53

Low Ability			Behavior Problems**		
<10%	*26-50%*	*>51%*	*<10%*	*26-50%*	*>51%*
69	62	45	69	31	38

	Sex		Race	
	Males	*Females*	*Black*	*White*
In the school cafeteria:	64	64	83	56

Low Ability			Behavior Problems**		
<10%	*26-50%*	*>51%*	*<10%*	*26-50%*	*>51%*
81	64	45	67	47	50

	Sex		Race	
	Males	*Fe:*	*Black*	*White*
In student restrooms:	38	54	75	36

Low Ability			Behavior Problems**		
<10%	*26-50%*	*>51%*	*<10%*	*26-50%*	*>51%*
56	50	35	50	38	25

* Significant at .01 ** Significant at .05

empty classrooms, hallways and stairs, and locker rooms or the gym while teachers of both sexes, but especially the males, felt at least fairly unsafe in restrooms used by students.

Not surprisingly, teachers' perceptions of personal safety and their assessments of their students' abilities appear to be associated as well. For example, teachers rating the abilities of fewer than half of their students as "low," consistently reported the highest feelings of safety in each campus setting. At the other extreme, however, were those teachers with a majority of students exhibiting either low academic ability or what they described in their students as behavioral problems. As table 8.2 shows, in each case and for each school setting, these teachers felt the least safe. Whether their increased fear resulted from the students they were assigned – or whether their opinions of their students are influenced by their fear – is, of course, not known. That their fear influences their responses, however, is clear, since while few teachers acknowledged lowering student grades in response to misbehavior in class, those most concerned about crime on campus were significantly more likely to do so. Finally, in settings where students regularly gather during the school day – student restrooms, the cafeteria, and hallways and stairs – more experienced teachers and teachers rating student ethnic relations the highest also expressed the fewest concerns about personal safety and conflict.

The Impact of Fear

If the consequences of conflict and fear among students have adverse impacts on learning and the educational environment, the effects from teacher concerns can be equally troubling. For example, where two-thirds of the male teachers advised that during the previous year they had never hesitated to confront misbehaving students, more than half of the female teachers admitted that they had been reluctant to intervene on at least one or two occasions. Similarly, teachers who viewed race relations among students the worst and those with the higher percentages of low-ability and behavioral-problem students expressed the greatest reluctance to become involved when stu-

dents are misbehaving. At the same time, teachers with fewer than five years experience reported the greatest disruptions to their teaching from student behaviors. Those teachers who liked their jobs and were satisfied with them, taught the fewest low-ability students and thought that both parents and teachers and students of different races got along well reported spending significantly less time dealing with student classroom behaviors (talking, fighting, etc.). It is hardly surprising that the teachers who most want to continue working with students like the ones they now have also view their students' behavior to be the least disruptive.

Unfortunately, the hesitations of teachers who are concerned about safety may also be well-founded. Nearly three-fourths of the white teachers at West Mecklenburg reported receiving obscene remarks or gestures from students during the previous school month. Far fewer black teachers (40%) received these perceived threats or lack of respect. Forty percent of the whites (28% of blacks) reported being threatened outright by their students and 20 percent explained that they had been the victims of both theft and damage of personal property worth more than $10. Males, too, reported somewhat higher levels of victimization than did their female peers. Where more than 70 percent of the male teachers (61% of females) had received obscene gestures during the previous month, roughly one-fourth had been victimized by both theft and damage of property that resulted in a loss greater than $10. Only 11 percent of the female faculty had similar property stolen and 13 percent had experienced similar property damage. Interestingly, and perhaps related to their experiences, both males and white faculty also considered students of different races to be less able to get along than did their female and black counterparts. It appears, then, that it is the white teachers and students who confront the highest levels of fear while in school, although black students most frequently experienced conflicts.

Table 8.3 indicates that teachers with the largest share of both low-ability students and students known for behavioral problems were significantly more often the recipients of ob-

155

Table 8.3
Teacher Threats
(Percent victimized in the previous month)

		West Meck	Garinger
		Obscene Gestures or Remarks	
Percent low-ability students	Less than 10%	44%**	12%
	11% to 50%	66	50
	More than 51%	85	68
Percent students with behavior problems:	Less than 10%	51*	24
	11% to 50%	79	71
	More than 51%	88	64
		Threatened in Remarks by Students	
Percent low-ability students:	Less than 10%	12%*	--
	11% to 50%	34	28%
	More than 51%	65	46
Percent students with behavior problems:	Less than 10%	21*	6*
	11% to 50%	50	43
	More than 51%	62	57
		Theft of Property Worth Over $10	
Percent low-ability students:	Less than 10%	12%	--
	11% to 50%	13	11
	More than 51%	30	7
Percent students with behavior problems:*	Less than 10%	7*	6
	11% to 50%	24	10
	More than 51%	38	14
		Property Damaged Worth Over $10	
Percent low-ability students:	Less than 10%	6%*	--
	11% to 50%	21	8%
	More than 51%	20	7
Percent students with behavior problems:	Less than 10%	7**	3
	11% to 50%	26	5
	More than 51%	38	21

* Significant at .01 ** Significant at .05

scene remarks and gestures as well as actual threats from their students. Understandably, these teachers were also less satisfied with their jobs, assessed student race relations and parent-teacher relations less favorably and reported significantly less interest in continuing to work with "the kind of students I have now." Still, an expected relationship between teacher experience and student threats or obscene gestures was not found.

Student/Teacher Responses

Concerning their students, nearly one-fourth of the West Mecklenburg High teachers advised that more than half of their time in their classrooms was directed at coping with disruptive student behavior. So bad were these problems in some classes that at least 10 percent of the teachers admitted that disruptive student behavior, such as talking and fighting in the classroom, interrupted their teaching "a great deal" of the time. Another 38 percent acknowledged that such behaviors interfered at least "a fair amount." Unfortunately, when asked what percentage of their students are behavior problems, 10 percent estimated the number at more than half. Over 20 percent added that at least half of their students were also of low learning ability. In response to these concerns, at least a third of West Meck's teachers supported physical punishment as an effective tool for dealing with misbehaving students. Even so, a surprising two-thirds declared that they wanted to continue working with students like the ones they have now. On most measures, the comparison teachers at Garinger High School felt similarly.

For their part, the students at West Mecklenburg High appear to hold their teachers in fairly high regard. For example, while only one-quarter of the West Meck students felt that their teachers usually treated them with respect, the vast majority nonetheless liked their teachers (73%), counselors (88%) and the school's principal (65%). Agreeing that their teachers generally let them know what is expected of them (90%), most students added that their teachers' opinions of them were very important. Recall, however, that male students (47%), blacks (45%) and students of other races (48%) appeared somewhat less con-

cerned with what their teachers might think of them than were females (58%) and white students (58%) generally. Still, the differences between these groups were not statistically significant. That the differences are real, however, is suggested by the greater respect expressed for teachers by their female students (88% vs 73% for males) who also expressed consistent views that they worked much harder in school than other students and that they were more often perceived as good students by others. Interestingly, no differences in student respect for teachers or satisfaction with school that could be attributed to student race or ethnicity were found. When grouped together for analysis, however, students describing themselves as Native American, Asian American, Spanish American, and as members of other ethnic groups did report working significantly harder in school relative to their peers. They also more often expressed the view that others see them as good students.

Evaluating the System

Not surprisingly, the West Mecklenburg High School students and teachers also differed in their estimation of the students' impact on the school environment. Recall that while two-thirds of the students as tenth graders strongly agreed that the school's rules were known by everyone, fewer than 20 percent agreed that they were "almost always" fair. Only four percent felt confident of their collective ability to get unfair rules changed.

As for the teachers, however, more than half agreed that they and their students worked together to make rules governing behavior in the classroom and that students, in fact, should have a lot to say about how the school is run. On this point, female staff, blacks and faculty who had not been threatened by a student were most supportive. In examining the school climate, teachers were about evenly split (51%) on the view that students help make the school's rules (a strong contrast to the students' view of their own role), with nearly three-fourths agreed or strongly agreed that students could get an unfair rule changed. As for the rules themselves, nearly 80 percent of the

faculty reported that everyone was aware of them. When violations do occur, nearly three-fourths noted that clear guidelines for discipline are available and are followed by both teachers and administrators. When asked about their own relations with the school's administration, more than 70 percent reported that little tension existed and an even larger proportion (84%) considered the administration as supportive. Still, 30 percent agreed that it is hard to change established procedures at the school and nearly 40 percent felt that their students don't really care about the school. Males, whites and teachers with the least experience were most convinced of student apathy. Even so, only 12 percent considered the school's problems to be too big to realistically expect that they could make much of a dent in them. Overall, 85 percent of the West Mecklenburg High teachers reported that they liked or even loved their jobs while 58 percent were satisfied with their jobs at least most of the time.

The Impact on Teachers

While the project appears to have had positive effects on the West Meck students, similar effects on the teachers were observed, but are more difficult to assess. For example, where nearly 29 percent of the faculty had considered vandalism, personal attacks or theft to be no more than a small problem, by the end of the project year fewer than 12 percent continued to feel so. In fact, among female staff, whites and teachers with at least 15 years of experience the impact was even more pronounced. Additionally, as table 8.4 shows, those teachers who strongly agreed that the school had written policies to cover most problems: those who agreed that those guidelines were followed and those who felt both that the administration was supportive and that their students cared about the school were also significantly more likely to minimize those crime problems as school problems by the project end.

Nor, apparently, were the teachers' feelings of greater safety unfounded. When asked about their own victimization during the previous month, as a group the faculty reported that vandalism (with damage over $10), theft (under $10), threats

and the receipt of obscene remarks or gestures by students had each diminished substantially. Although not statistically significant, female staff reported the greatest reductions in theft (-48%), threats (-58%) and obscene remarks and gestures (-30%); males in reduced vandalisms (-38%); and black faculty in threats (-72%), vandalism (-52%) and thefts (-42%). Teachers with fewer than five years experience encountered fewer threats (-52%), while obscene remarks and gestures were reduced primarily among those with 10 to 15 years tenure (-47%). Interestingly, offensive remarks and gestures from students actually increased among faculty with five to nine years experience (+70%), although for each of these groups caution is urged in the data's interpretation since sample sizes are consistently small. Meanwhile, no meaningful changes in victimization were observed among the Garinger faculty and staff.

Table 8.4
Fear of School Crime Among West Meck Faculty
(Percent rating vandalism, attack, and theft as "fairly" or "very" much a problem)

Faculty	May 1994	Dec. 1994	May 1995
Gender			
Female**	28%	11%	6%
Male	30	10	23
Race			
White**	37	16	14
Black	8	7	4
Experience			
Less than 5 years	28	19	20
More than 15 years**	32	8	7
Administration is supportive of teachers			
True*	25	11	10
False	54	36	40
Students don't care about the school			
True	46	8	27
False**	20	16	6
All Teachers **	29	14	12

* Significant at .01 ** Significant at .05

While impressive, these experiences appear to have had little effect on teachers' feelings of safety in their own classrooms, the cafeteria, hallways, stairs or restrooms. Many did, however, report improved classroom conditions. For example, by the end of the project year, only 11 percent of teachers were still committing at least half of their classroom time to dealing

Table 8.5
Victimizations Among West Mecklenburg Faculty
(Percent experiencing in the past month)

	May 1994	Dec. 1994	May 1995
Females (N=177)			
Theft of personal property worth less than $10	22%	23%	12%
Damage to personal property worth more than $10	13	10	10
Obscene remarks or gestures from a student	61	50	43
Threats in remarks by a student**	39	34	16
Males (N=97)			
Damage to personal property worth more than $10	27	13	17
Blacks (N=81)			
Theft of personal property worth less than $10	20	17	12
Damage to personal property worth more than $10	16	13	8
Threats in remarks by a student**	28	27	8
Whites (N=187)			
Theft of personal property worth less than $10	26	20	16
Threats in remarks by a student**	40	33	31
Obscene remarks or gestures from a student	74	60	58
Experience			
Less than five years (N=91)			
Damage to personal property worth more than $10	24	19	13
Threats in remarks by a student	48	44	23
More than fifteen years (N=120)			
Theft of personal property worth less than $10	21	18	14
Threats in remarks by a student	29	25	19
Obscene remarks or gestures from a student	66	52	43
All Teachers			
Theft of personal property worth less than $10	24	20	16
Damage to personal property worth more than $10	19	11	12
Obscene remarks or gestures from a student	65	55	50
Threats in remarks by a student	36	33	24

* Significant at .01 ** Significant at .05

with disruptive student behavior – a considerable drop from the nearly 22 percent at the project's start. Similarly, where 50 percent had reported that student behavior interfered with their teaching at least a fair amount, fewer than 38 percent continued to have such problems by year's end. In each case, white and female staff appear to have noticed the greatest impact; however, caution in interpretation is again advised since the differences are not statistically significant. Still, since the entire eligible population of teachers was surveyed at both schools, as we interpret these results an "intuitive" standard of significance may be most appropriate, especially since they correspond to the behaviors self-reported by the students.

Teacher/Student Relations

While some teachers were noticing improvements in classroom behaviors, significant differences were found in their interactions with students as well. For example, where only slightly more than half (56%) of the West Meck teachers reported no hesitation in confronting misbehaving students at the start of the student problem-solving; by the project's completion, more than 70 percent were no longer concerned for their own safety in such instances. Female faculty, especially, came to feel more secure in confronting misbehaving students; teachers with the least experience (less than five years) as well as those most of-

Table 8.6
Teacher/Student Relations at West Mecklenburg High
(Percent who never hesitate to confront misbehaving students)

	May 1994	Dec. 1994	May 1995
Male	65%	70%	77%
Female	49	72	68
Black	72	77	88
White	48	70	62
< 5 years experience	52	68	80
All teachers	56	71	70

ten satisfied with their jobs also grew considerably more willing to intercede. Meanwhile, Garinger High School faculty grew even more hesitant in confronting their misbehaving students, suggesting that the improved discipline at West Mecklenburg High is not the result of either student maturation or the comfort that comes from the greater familiarity between teachers and students as the school year progressed.

Perhaps as a result of these improved classroom conditions, as the students' problem solving progressed, teachers also became significantly more likely to report that they had themselves learned a great deal about both maintaining discipline and handling disruptive students. Females, whites and teachers who viewed their administration as supportive of their efforts reported the greatest increases in their own knowledge and skills. Here, too, attitudes at Garinger High School, the project's control school, actually deteriorated somewhat (even though actual victimization appears to have changed little) suggesting that the results at West Mecklenburg High can be attributed to the School Safety Program.

Beyond their disciplinary concerns, teacher/student relations appear to have improved in other ways as well. For example, while most had initially maintained that any student who really tries can get satisfactory grades, black faculty and not surprisingly, teachers who had not been threatened by students either outright or by obscene remarks, became even more certain as the project progressed. Similarly, where the largest group of teachers (32%) had initially estimated that between one-fourth to one-half of their students were of "low ability," by mid-year teachers' impressions of their students' abilities had improved such that the largest group now estimated that only between 10 and 25 percent were low ability. By the end of the project year, this modal estimate (28%) of low-ability students had improved further to fewer than 10 percent. As before, female and black teachers maintained the most positive views of their students, although, caution is again appropriate since the differences are not statistically significant.

Other increased expectations of West Meck's students can be seen as well. Where two-thirds of the staff had agreed that

Table 8.7
Teacher/Student Relations at West Mecklenburg High

Teachers who:	May 1994	Dec. 1994	May 1995
Learned effective methods of maintaining discipline:			
Male	64%	50%	69%
Female*	57	79	85
Black	76	83	88
White**	53	65	75
>15 years experience*	50	68	82
All teachers	59	70	77
Learned how to handle disruptive students:			
Male	64%	50%	69%
Female*	57	79	85
Black	76	83	88
White**	53	65	75
>15 years experience*	50	68	82
All teachers	59	70	77

* Significant at .01 ** Significant at .05

some students are just young and should be treated accordingly, by the end of the student problem solving, less than half of the school's staff were willing to discount student responsibility so easily. It is important to note that the significant changes in their opinions of students' responsibilities occurred among the few groups of teachers most involved with their students (females and blacks) as well as those who had not been threatened or received obscene remarks or gestures. That no changes were observed among other West Meck teachers or among teachers at Garinger High School suggests that the results are not simply the result of student maturation but are, in fact, associated with the problem-solving efforts.

Teachers' impressions of their students' investment in the school community also improved considerably. Early in the project year, more than a third of the school staff agreed that students did not care about their school. Once the problem-solving efforts got underway, however, those estimates dropped more closely to one-quarter. Where more than 13 percent had reported that students of different races could not get along very well at school, by year's end, after the students had done so while addressing their school's problems, only two percent of the teachers continued to express that concern. Even better, the improved perceptions occurred among all groups of teachers. Perhaps reacting to these enhanced expectations,

Table 8.8
Perceptions of Student Interactions at West Mecklenburg High

Teacher Perceptions:	**May 1994**	**Dec. 1994**	**May 1995**
(Percent who agree either "somewhat" or "strongly")			
Students here don't really care about the school:			
Male	47%	40%	40%
Female	31	20	20
Black	25	17	19
White	43	30	27
Threatened by a student	59	53	36
All teachers	36	26	28
Students of different races do not get along well at school:			
Male	16%	14%	3%
Female	11	5	2
Black	8	4	0
White	14	8	3
Threatened by a student	21	14	9
All teachers	13	8	2

Table 8.9
West Meck Teachers Who Want to Continue Working with Similar Students

Faculty	May 1994	Dec. 1994	May 1995
Gender			
Female**	66%	72%	87%
Male	67	67	73
Race:[1]			
White	61	66	79
Black	83	80	88
Experience:			
Less than 5 years*	50	69	86
More than 15 years	78	75	86
Job satisfied[1,2,3]			
Most of the time**	84	83	97
Some of the time	41	48	43
Students don't care about the school:[1,2,3]			
True**	33	54	64
False	87	76	90
All teachers **	66	70	83

* Sig. at .01 ** Sig. at .05
[1,2,3] Data waves where differences between groups are sig. at .05

black faculty, women and teachers with more than 15 years of experience each expressed a reduced support for the use of physical punishment for dealing with misbehaving students – a view shared by teachers who considered crime on campus to be no more than a small problem and, surprisingly, those who had experienced a theft of personal property worth more than $10 during the previous month.

Finally, although two-thirds of West Mecklenburg High's teachers began the school year agreeing that they would like to continue working with the kinds of students they have now, this teacher-student connection improved even further – by midyear 70 percent agreed and by year's end a significant increase to nearly 83 percent had occurred. While females and

black teachers continued to offer students the highest levels of support, the improved reactions among the white staff were such that by the end of the project year the differences between the views of black and white faculty had been reduced by nearly 60 percent and were no longer significant. Similarly, where teachers with fewer than five years of job experience had been evenly divided on the question and had lagged far behind their more senior peers, as the problem-solving activities continued they became increasingly supportive. By the final data collection period, more than 86 percent of the teachers wished to continue with like students. Naturally, teachers who were satisfied with their jobs at least most of the time both began the year more appreciative of their current students and grew significantly more so as the year progressed. In fact, by year's end, 97 percent of these teachers, compared with only 43 percent of those who were satisfied only some of the time, wanted to continue with students like those they currently taught. Likewise, an inverse relationship was found between the percentage of a teacher's students who were either low ability or behavior problems, and the desire to continue with others like them. Meanwhile, although only a third of the teachers who believed that their students did not care about the school wanted to continue teaching similar students, by the end of this project featuring student involvement, they too had become significantly more supportive. Table 8.9 compares the willingness of different teacher groups to continue with students like those presently in their classrooms.

Impacts on the School Environment

One final area where project impacts might be found involves the working conditions for teachers and the overall climate of the school in which they work. While the project's student-led problem solving does little to address a teacher's working conditions directly, it was anticipated that the solutions to school problems, and the collaborative process of reaching them, might have positive displacement effects. If so, school rule making, parent/teacher relations and interactions with both

colleagues and the school's administrators might each be improved indirectly.

Most likely related to their more positive perceptions of the students at West Mecklenburg High, the school's female and black teachers offered the most optimistic outlooks on their jobs and the school community. For example, while both male and female teachers began the school year with roughly comparable levels of job satisfaction (60% satisfied at least most of the time), as the year progressed the male staff changed little. Levels of satisfaction among females, however, rose such that by year's end more than 80 percent reported being satisfied most, or even all, of the time. Black teachers, on the other hand, began their school year far more favorably with 75 percent, as opposed to 53 percent of their white colleagues, reporting a high degree of job satisfaction. While the difference between the outlooks of black and white staff was reduced somewhat by year's end, as a group the school's white staff appear to have had less job comfort than their peers. Although a similar pattern was found early on in each group's impressions of administrator-teacher tensions, significant improvements were realized by each as

Table 8.10
Job Satisfaction for West Mecklenburg High Teachers
(Percent satisfied most or all of the time)

Faculty	May 1994	Dec. 1994	May 1995
Gender:			
Female	60%	66%	80%
Male	58	67	63
Race:			
White	53	65	69
Black	75	70	85
Experience:			
Less than 5 years	43	59	77
5 - 15 years	75	75	67
More than 15 years	62	68	76
All teachers:	58	67	75

more than 93 percent of all teachers reported the presence of little tension in the school. Since fewer than 40 percent of the Garinger faculty felt similarly about their school, we can only conclude that the School Safety Program was fortunate to have occurred in an overall secure and supportive environment – a conclusion that is important for both program longevity and for those who might replicate the effort.

As evidence of the school's supportive environment, the great majority of the faculty (84%) began their school year with a belief that their administration is supportive of its teachers. During the year, that view was reinforced, especially for the male staff members who were less certain initially (78%), but became more secure of their support (97%) as administrators gained opportunities to demonstrate it. Even so, when asked to respond to a statement claiming that it is hard to change established procedures at the school, more than 30 percent agreed

Table 8.11
West Mecklenburg Faculty Who Agree That It Is Hard To Change Established School Procedures

Faculty	**May 1994**	**Dec. 94**	**May 1995**
Gender:[1,3]			
Female	19%	26%	28%
Male	46	45	57
Race:			
White	32	34	34
Black	26	28	38
Received obscene gestures or remarks:[3]			
Yes	34	40	49
No	23	23	27
Was threatened in remarks by a student:[3]			
Yes	36	38	54
No	27	30	33
All teachers:	30	32	38

[1,2,3]Data waves where differences between groups are sig. at .05

initially, with some increase, though not a significant one, occurring at each subsequent data collection period. Interestingly, doubts about the willingness to change school procedures increased more among black than white teachers, perhaps out of frustration as higher expectations weren't met. The most significant differences, however, occurred between the views expressed by males and females and between faculty who had received threats or obscene gestures from students and those who had not.

Beyond their concerns about procedural changes, a consensus does appear to have existed among the faculty that both parents and the community are receptive to the introduction of new ideas in the school. Further, the majority of teachers agreed that the ideas of teachers are listened to and used. No differences between staff members that could be attributed to the project were found.

As for their principal, school staff agreed that he was fair and open to input, although at mid-year males, blacks, teachers who had been victimized at school (by theft, threat or obscene gestures), and those with fewer than five years or more than 15 years of experience became less certain. Shortly after those data were gathered, however, the principal who began the year (and the project) was promoted to a position in the central administration. While his assistant principal assumed his previous position, the uncertainty of transition may have been the cause of these teachers' concerns. By the end of the school year, as the transfers were complete, confidence in the new principal appears to have risen above even the previous levels. Since the new administration had participated fully in the development and introduction of the problem-solving efforts, no impact on the project was found.

The Significance of Peers

While the project's student problem-solving activities may have influenced the impressions of both teachers and students of their school environment, as well as how both interacted with and perceived the other, an effect on peer relations among

Table 8.12
Staff Descriptions of the West Mecklenburg Teaching Faculty
(Percent agreeing)

Teachers are	May 1994	Dec. 1994	May 1995
Frustrated			
Female**	60%	60%	38%
Male	61	57	45
White**	67	62	44
Black	44	50	35
< 5 years experience	64	56	52
> 15 years experience*	53	58	29
All teachers*	60	59	41
Tense			
Female*	49	45	23
Male	53	50	33
White*	56	55	29
Black	38	30	23
< 5 years experience**	46	48	21
> 15 years experience**	51	38	21
All teachers*	51	47	27
Satisfied			
Female*	49	52	79
Male	39	33	43
White*	41	49	68
Black	56	40	65
< 5 years experience	39	47	62
> 15 years experience	56	43	69
All teachers*	45	46	66

* Sig. at .01 ** Sig. at .05

teachers is far more difficult to assess. For example, although nearly two-thirds of the faculty at West Mecklenburg High agreed at the outset that they tended to be conservative and traditional, they also considered themselves as cohesive, innovative, enthusiastic and open to change. Still, while denying a suggestion that they might be apathetic about their work, roughly half of the teachers surveyed at the start of the school year did agree that they and their peers felt unappreciated, frustrated and tense.

Although it is likely that the School Safety Program played only a secondary role in the school's improving environment as a workplace, as the year progressed, a significant number of teachers began to offer far more favorable descriptions of their colleagues. For example, where more than 60 percent of the staff had described the teaching faculty as frustrated, by year's end only 40 percent continued to do so. Females, whites and teachers with the most tenure experienced the sharpest change in their impressions, although the school's black faculty began the year with a far more positive outlook. Not surprisingly, those who devoted the most time to coping with disruptive students and had the largest numbers of low-ability and behavioral-problem students were the least likely to experience positive changes in their views.

Similarly, the percentage of teachers reporting their peers as tense declined as the year progressed. Here, too, female staff and whites revised their views most significantly. Interestingly, however, staff at every level of tenure, except those with between five and nine years teaching experience, reported significant improvements in their perceptions. Meanwhile, these same teachers developed similarly enhanced views of teacher satisfaction.

On the more assertive characteristics, such as their colleagues' enthusiasm, innovativeness and willingness to change, improved perceptions resulted as well. Here, the changes observed occur broadly and are not associated with any individual group of teachers. Caution is again urged since the changes are not statistically significant.

Conclusions from the Teachers

Fortunately, the School Safety Program appears to have been introduced into a school setting where it was well-received and supported. In addition, despite a transition in the school's administration, the overall climate at West Mecklenburg High School as a workplace appears to have been healthy at the start, and improved as the school year progressed. As a result, the school's staff were better able to understand the project's goals and be supportive of its methods. In other words, since the teachers felt secure of their own place in the school community, they could better encourage their students to develop their own. Since projects such as this one always depend on and must interact with the environment in which they exist, it is probably not possible to know which influenced the other more. What is important to recognize, however, is that similar success becomes far less likely elsewhere when readiness for a collaborative model of problem solving is less well established.

From this setting, we know that when such conditions are present, impressive results are possible. On a personal level, as the student-focused problem solving progressed, both teachers and students reported fewer conflicts and disruptions in their classrooms. While all groups of faculty experienced reductions in victimizations, female and black faculty in particular were impacted by the change. As a result, conditions in their classrooms and interactions with students become considerably less threatening. In addition, many teachers reported having learned a great deal about maintaining discipline and handling disruptive students.

As they felt less threatened, teachers' perceptions of their students appeared to soften as well. As the year progressed, many faculty become less willing to excuse their students from responsibility, came to see their students as more involved in school concerns, and considered race relations among students to be less troubling than before. In turn, fewer saw their students as having low academic ability. This latter result could have important implications for student performance. Finally, as evidence of their improved relations, teachers become sig-

nificantly more likely to prefer to continue working with students like those they now teach. With this in mind, the final chapter considers how this approach compares to others intended to improve the safety of our schools.

9 COMPARING THE OPTIONS: MODELING RESPONSES TO SCHOOL CRIME AND DISORDER

Depending upon who is asked, school crime and disorder is either among the most serious problems facing youth today or is a blown-out-of-proportion misperception created by media reports of a few sensational crimes. For example, Furlong and Morrison (1994) cite statistics from the most prominent and comprehensive school crime studies to date and conclude that, although criminal acts committed on school grounds are important and must be addressed, the perceptions of the seriousness of school crime greatly exceed the actual numbers. Others (Soriano, Soriano and Jimenez 1994; Stephens 1994), however, contend that *any* crime on campus is excessive and that the fear created by such crimes leads to undesirable social, psychological and educational effects. These, in turn, further influence the perceptions of unsafe schools and an unmanageable educational system.

As discussed in the opening chapter, research on school crime is predominantly survey in nature and falls into one of three general categories:

1. surveys of school administrators on the types and numbers of crimes and incidents committed within a specific time frame;
2. surveys of students, teachers, parents and administrators regarding their perceptions, attitudes and opinions about school crime; and
3. surveys of students, teachers and administrators to ask about their actual victimization within a specific time frame.

Without repeating the review of the studies discussed earlier, readers should also consider the only other source of school crime data - the official data collected by the schools themselves.

State Departments of Education

Beginning in the late 1980s, five states (California, Florida, North Carolina, South Carolina and Virginia) have regularly reported school crime statistics, although recently, California has discontinued the practice citing budgetary limitations. Other states apparently do not do so at least partly out of concern that the statistics they provide may reflect poorly on their educational systems (see Wayson 1985).

Fortunately, in examining the data from the five states that do provide them, it is apparent that in terms of actual crimes the nation's schools are not being overrun. There are, however, sufficient numbers of incidents on school campuses to warrant special attention. For example, in 1989 California had 174,478 school crimes reported statewide. Of those, slightly more than six percent, or at least 10,468 incidents, involved a weapon of some type. Beyond just the physical harms they are capable of inflicting, even this availability of weapons on campus creates an atmosphere of fear that may prompt others to arm themselves at school for protection. Further, it is interesting to note that the number of gun possession charges in California's schools more than doubled from 503 in 1986, to 1,131 in 1989 (California Department of Education 1990).

In contrast to California, more than 18 percent of the 2,991 school crimes reported in South Carolina during the 1991-92 school year involved weapons, with one-third of those involving a gun (South Carolina Department of Education 1993). Although the number of actual crimes was substantially lower than in California, since a greater percentage of crimes involved guns, the potential lethality of school crimes would appear to be much higher. Still, despite these differences in weapon availability, California schools reported 14 school-related homicides, while South Carolina reported none.

The crime data for Florida indicates a 33 percent increase in the number of crimes and more than double the number of gun possessions from 1991 to 1992. Although one might contend that the 61,482 reported crimes in Florida is little cause for concern (especially relative to the school-aged population in that state), the rising rate of gun possessions, coupled with a steadily increasing assault rate, would certainly suggest otherwise (Florida Association of District School Superintendents and Florida Education Association United 1992).

Finally, the crime survey data from North Carolina are significant for at least two reasons. First, for the school year 1991-92, North Carolina reported an overall school-based crime rate only one-sixth of California's, but with over half as many gun possessions. Second, the number of assaults involving weapons is nearly double that of the far larger California jurisdictions (North Carolina Governor's Crime Commission 1993). Clearly, the potential for harm in North Carolina is high, especially for children being assaulted or trying to protect themselves from other harms. The number of assaults involving weapons may also have serious implications for teachers and other school personnel who are called upon to intervene during an assault, since the presence of weapons during a physical altercation significantly increases the likelihood of harm, whether intentional or not.

The Rationale for Focusing on School Safety

The data from the states and the national studies discussed earlier indicate that the concern over school crime is less about the frequency of incidents than about the intensity or lethality of the criminal acts that are reported on campuses across the country.

Few would disagree that children must both feel and be safe in school if they are to maximize their educational experience. Both federal and state governments have reinforced the necessity of making our nation's schools safe havens of learning with their passage of the Safe Schools Act of 1994 and local bills such as mandatory safe school planning (South Carolina) and the Victim's Bill of Rights (California). Despite the obvious ne-

cessity, however, Morrison et al. (1994) and others correctly note that at least historically, educational systems have been reluctant to directly address their problems of crime and violence. Among the reasons for the lack of attention was the belief that crime was a problem for the police and criminal justice systems. Many teachers also felt that they lacked the necessary training and resources to deal with the types of problems that occur in their school communities. Recently, however, some educators have begun taking a more active - even proactive - role in addressing and preventing school crime.

What Works?

In 1997, Sherman and others at the University of Maryland, conducted a lengthy review of criminal justice interventions in an effort to advise Congress about promising programs. In her chapter on school crime, Denise Gottfredson examines 149 recent programs that she groups into two broad categories: 1) those that attempt to alter school classroom environments, and 2) those that are intended to change the "behaviors, knowledge, skills, attitudes, or beliefs of individual students." Within each of these broad groupings, she further distinguishes programs according to their goals.

Environmental Change Strategies:

- Building school capacity,
- Setting norms for behavior, rule-setting,
- Managing classes, and
- Regrouping students.

Individual Change Strategies:

- Instructing students,
- Behavior modification and teaching thinking strategies,
- Peer programs,
- Other counseling and mentoring, and
- Providing recreational, enrichment and leisure activities.

While the approach is an easy way to categorize school crime efforts, Gottfredson goes on to note that the task classifying individual programs becomes difficult since "most school-based prevention programs contain a mix of different types of activities." In fact, of the 149 studies examined for this review, most (94%) contained multiple components.

> The multi-component strategy found in most studies of school-based prevention is perfectly reasonable given the nested nature of the schooling experience and the multiple routes to problem behavior. Student behavior is most directly influenced by the attitudes, beliefs, and characteristics of the student and his or her peers. Individually targeted interventions such as instructional or behavior modification techniques that teach students new ways of thinking and acting may be effective in changing these individual factors. But several of these individual factors are likely causes of problem behavior and are best targeted through a set of inter-related program components rather than through a single intervention. Moreover, students interact in the context of classrooms, each of which has its own normative climate encouraging or discouraging certain behaviors. And classrooms exist in school environments which establish larger contexts for all activities in the school.

In other words, she concludes, school-based programs that work to reduce crime and delinquency do so because they:

- Build school capacity to initiate and sustain innovation.
- Clarify and communicate norms about behaviors. Successful programs establish school rules, improve the consistency of their enforcement, and communicate norms through school-wide campaigns.
- Focus on social competency skills, including responsible decision-making, problem solving, and communications skills.
- Teach "thinking skills" to high-risk youths.

Conversely, the research examined seems clear that individual student counseling, especially in peer group contexts; alternative activities, such as recreation and community service; and instructional programs that focus on information dissemination, fear arousal and moral appeals are all ineffective.

The School Safety Program

Like the research examined by Gottfredson, the Charlotte School Safety Program utilized multiple components intended to build school capacity, reinforce behavioral norms and increase social competency skills. The heart of the project required student participation in a problem-solving process to create an environment where students, working together with teachers and police, could identify their school community's problems and accept responsibility for solving them. As the program was developed, it incorporated a number of recommendations offered elsewhere as well; recommendations such as those offered by Stephens (1994) in the "Topic Schedule for Safe School Planning Process." Somewhat mirroring the Charlotte effort, Stephens' process guides educators in a five-step process that includes directions to

- set the context for the community systemwide response;
- develop problem identification and resource inventories;
- conduct analyses of needs;
- develop implementation plans; and
- incorporate conferencing and training sessions.

In addition, Stephens lists 27 "Essential Components of a Safe School Plan," which includes curriculum focusing on prosocial skills and conflict resolution, student leadership and involvement, school/law enforcement partnerships and evaluation and monitoring – all elements of the School Safety Program.

To achieve such goals, the School Safety Program added problem-solving components to the regular government and history curriculum required of eleventh-grade students in one high school – West Mecklenburg High in Charlotte, North Carolina. Incorporating the model into regular classroom activities on a weekly basis, the stu-

dents, teachers and school resource police systematically set about identifying and solving school problems, especially those involving issues of school safety.

As the project progressed, the student-led groups confronted issues as diverse as conflicts in the lunchroom, safety in the restrooms, and teenage pregnancy. While not all of their solutions were successful (or even feasible), each group involved reported the process to be more interesting than they had initially imagined. Despite variation in participation depending upon teacher style, classroom structure and student ability, as the students passed through the four-stage process, impacts from their efforts quickly became apparent. Beyond the intuitive appeal of the approach, however, it remains important for us to ask: Why else might the program have worked?

Determinants of Success

Chapter Three outlines five prominent reasons that help to explain why large-scale programs are so often ineffective. Taken from reviews by Kazdin (1993) and Takanishi (1993), we observed that

- although providing information and education are necessary components of a prevention program, they are seldom sufficient to induce changes in behavior;
- staff and teachers expected to carry out most programs are often inadequately prepared for the task;
- few programs are carried out with a high degree of integrity;
- program duration is usually too brief; and
- inadequate support from administrators, parents, and community leaders is offered.

In designing the School Safety Program, we paid particular attention to each of these concerns to prevent them from negatively impacting the program.

First, instead of simply providing information and education to the teachers and students participating in the program, West Meck's teachers were led to develop a process intended to result in significant behavior changes in their students – specifi-

cally, the manner in which students resolved school-related problems. Instead of only reacting (often emotionally) to the problems they face, students learned and practiced the skills necessary for a formalized, step-by-step process of response. From this, the participating students appear to have developed a sense of increased control over their environment that was not present prior to the program. In turn, this added influence led to the student "ownership" of school concerns so important to successful intervention

Prior to the program, the participating teachers from West Mecklenburg High were themselves trained in the steps and substeps of problem solving. Although their role was one of facilitating – rather than directing – student problem solving, it was important for them to understand the process itself so that they could knowledgeably guide their students. In addition, the teachers designed worksheets and accountability logs so that student participation and success in the problem-solving process could be measured. Finally, project staff regularly visited individual classrooms so that difficulties with the process could be identified, efforts could be reinforced and feedback on ways to improve the process could be provided.

Equally important are problems of treatment integrity. Where programs are not implemented in the manner in which they were intended, it becomes especially difficult to determine whether results should be attributed to the program itself or to other factors extraneous to the process. To ensure a high degree of treatment integrity, the process of the School Safety Program was monitored using a combination of

- classroom observations,
- examinations of student worksheets and accountability logs,
- examinations of teacher narrative logs, and
- focus group meetings to review the project's process.

During our classroom observations, project staff reviewed the steps and stages of each problem-solving group, the topics of discussion in each class, the approach and behavior of each participating teacher, levels of student participation and the

amount of class time being devoted to the problem-solving process. We compared classroom observations to the data gathered from the student worksheets and accountability logs, finding a generally high degree of consistency. Throughout the study period, focus groups of students and teachers were also assembled so that the process, their activities and the results they expected could be discussed. Based on the results of these efforts, project staff believe that adherence to the program design occurred, despite the considerable variation noted in the progress of individual classes.

It is also important to mention, however, that despite program monitoring and feedback, some teachers nonetheless had difficulty with the process. Specifically, while they devoted the allotted time each week to their problem-solving classes, they did not progress through the stages and steps appropriately. In these cases where treatment integrity was lower, we attempted to demonstrate how to get the problem-solving efforts back on track and spent additional time observing and giving feedback. These efforts did not appear to be effective for two teachers who remained unable to implement the program as intended. The results in these teachers' classes speak largely for themselves.

Among the unique features of this effort was the year-long duration. Initially, we seriously doubted that a single semester of student problem solving would be sufficient so, at least in part, the decision was made to couple the effort with the year-long, eleventh-grade history classes. Other courses that might have been appropriate lasted only one semester. The year-long status of the program may have further communicated the administration's support, which may have enhanced the commitment of students and faculty as well.

Finally, from the beginning, all of the primary administrative staff were kept abreast of program development. As the program was designed and implemented, key personnel (the principal, assistant principal and the school's police resource officer) were each included to ensure their support and to convey their commitment to the students and faculty. Statements of support from these staff are included as appendix A.

Goals of the School Safety Program

Perhaps no small portion of the success of the School Safety Program was due to its explicit, but simple, goal that students reduce disorder and disruption to make their school a safer place. As such, specific crime problems such as assaults, threats, weapons on campus and thefts were not identified *a priori* for the students' attention. This was so because outside problem specification would likely attenuate the feelings of anticipated student empowerment from the actual problem-solving process. In addition, from the students' perspectives, the types of problems that contribute to feelings of fear and disruption might be quite different than what teachers or other outside experts might identify. As one student aptly put it, "There are a bunch of things going on here that the teachers don't even know about. How can they know what's bothering us or causing problems?" As such, the emphasis on students being the agents of change seemed appropriate.

In addition, the overriding goal of the program was not to reduce or eliminate any specific problem on the school campus, but to make school itself a safer place. The type of problems addressed were considered to be less important than the use of the problem solving process by the students. And as the types of problems selected are identified, it is clear that the students did not necessarily choose those that are typically associated with disorder and disruption on a high school campus. This led to the conclusion that it was the process itself, rather than the solution of any specific concern, that was the active component in fear reduction.

The focus of problem solving in the School Safety Program is also different than that of the commercial problem-solving programs currently available. For example, the popular Skillstreaming (Goldstein, Sprafkin, Gershaw and Klein 1980) series focuses on teaching prosocial skills to adolescents. It is hoped that as a result of improved social skills, adolescents will get along better and thus cause less disruption and disorder in the school setting. The flaw of this approach can be found in the assumption that adolescents who cause disorder and disruption

lack these skills in the first place. Indeed, we can find no conclusive data to indicate that students who cause school disruptions are less socially skilled than their nondisruptive peers. Instead, it may simply be that the rewards for causing problems are greater than those for behaving appropriately.

The same can be said of programs that focus on conflict resolution to reduce fear and disruption. Although it may at times be true that unresolved conflicts result in school crime and disorder, our conversations with students at West Mecklenburg High suggest that at best this may be a secondary concern. For example, in describing their fear of the restrooms and cafeteria, the West Meck students focused more on the environment—its conditions and the climate in which they interact—than on the presence of others with issues or scores to settle. In each instance, by addressing these rather straightforward environmental concerns, the conditions in which student and student-teacher conflicts result were themselves eased considerably. As such, a primary focus on either individual prosocial skills or the development of conflict-resolution skills may overlook the root of the school crime problem.

Problem Solving, Rational Choice and Social Control

Finally, in addition to the specific programmatic features, there are important theoretical explanations for the success of problem solving in reducing school disorder and fear. As described in Chapter Three, a number of possible explanations have been offered for the occurrence of deviance and disorder. Wilson and Herrnstein (1985), for example, argue from a rational choice view that points to the rewards of misbehavior. Successful problem solving can collaboratively alter such reward/punishment equations, however, to build informal social controls to reinforce more positive actions.

The process of problem solving also improves the social bond that exists between students, students and teachers and between students and their school. As a common process for reaching mutually agreed upon goals became accepted, the at-

tachment, commitment and involvement of students at West Mecklenburg High, as well as their belief in the fairness of the "school society," increased significantly. It is also probable that as students become more connected to their school community, their appreciation of education itself will increase as well, as they exercise the opportunity to have significant input about serious issues that involve them. Because of the mandatory nature of the problem-solving classes and the time spent working on important school-related issues, we believe that such benefits are virtually inevitable.

A Few Concluding Thoughts

While it is difficult to specify the most significant contributor to the success of the School Safety Program, a few critical ingredients are clear:

- The program avoided the most common problems that beset large-scale programs;
- Goals and aims of the program were consistent with systemic change;
- The payoffs associated with disruptive behavior were decreased with a concurrent increase in the payoffs for socially appropriate behavior;
- The bond between students and between students and the school was increased;
- The problem-solving process was an active means by which students could gain a sense of control over their environment; and
- Students were empowered as a result of engaging in problem solving and witnessed the results of their efforts.

Beyond these factors, however, a few general observations were noted.

First, the most significant problems in schools may not be as the public often imagine them. Gangs, drugs and armed agitators may receive the most media attention, while most of the conflicts uncovered during the project were part of everyday school interactions. For example, an insufficient supply of pizza in a limited number of lunch room service lines created

far more campus disorder than any of the more frequently mentioned concerns. In short, as we have often found in other community settings, taking care of the little things will often satisfy the bigger ones.

Second, a school's students are interested in a safer, more orderly school environment. While many assumed that participation rates in the project's problem-solving steps would be low, teachers and project observers were consistently impressed by the extent of student involvement. Recall that one group discovered during analysis that they were themselves an important part of the school's problems. Though their discussions were boisterous, even they concluded that a need existed for policies to meet all of the school community members' needs.

Finally, it is important that the environment where this effort was attempted was receptive, if not enthusiastic, about the project. Having encountered previous problems of campus disorder, the teachers and administrators at West Mecklenburg High School were open to increased student influence in school governance and were willing to invest the time necessary to modify their own classes and class curriculum to achieve that end. Administrators, meanwhile, received the students as legitimate members of the school community, giving full and fair consideration to their ideas for improvement. As a result, the student efforts were encouraged and reinforced. In a less supportive environment, it is equally likely that the students' participation and commitment to self-determination could be irreparably harmed as they realize that serious consideration of their views is unlikely to occur.

In all, then, we believe that the Charlotte School Safety Program was a success in that it contributed significantly to the improvement of the school environment. Perhaps its real test, however, will occur as the students who participated continue to solve community problems beyond the classroom.

REFERENCES

Adler, F.; G. Mueller; and W. Laufer (1991). *Criminology.* New York, NY: McGraw-Hill.

American School Health Association (1989). *The National Adolescent Student Health Survey.* Oakland, CA: Third Party Publishing.

Bastian, L. and B. Taylor (1991). *School Crime: A National Crime Victimization Survey Report.* Washington, D.C.: National Institute of Justice.

Batsche, G. and H. Knoff (1994). "Bullies and Their Victims: Understanding a Pervasive Problem in the Schools." *School Psychology Review,* 23:165-174.

Bednar, R. and T. Kaul (1978). "Experimental Group Research: Current Perspectives." In S. Garfield and A. Bergin, (eds.), *Handbook of Psychotherapy and Behavior Change: An Empirical Analysis* (2nd Edition). New York, NY: John Wiley and Sons.

Bergan, J. (1977). *Behavioral Consultation.* Columbus, OH: Charles E. Merrill.

Bergan, J. and M. Tombari (1976). "Consultive Skill and Efficiency and the Implementation and Outcomes of Consultation." *Journal of School Psychology* 14:3-14.

Berger, J. (1991). "Metal Detectors to be Deployed in More Schools." *New York Times*, 7 November:B3.

Berman, P. and M. McLaughlin (1978). *Federal Programs Supporting Educational Change VIII: Implementing and Sustaining Innovations*. Washington, DC: Department of Health, Education and Welfare.

Blalock, H. (1961). *Causal Influences in Nonexperimental Research*. Chapel Hill, NC: University of North Carolina Press.

Blauvelt, P. (1989). Conversation with author.

Blauvelt, P. (1990). "School Security: 'Who You Gonna Call?'" *School Safety*, Fall.

Braiden, C. (1992). "Enriching Traditional Roles." In L. Hoover (ed), *Police Management: Issues and Perspectives*. Washington, DC: Police Executive Research Forum.

Bureau of Justice Assistance (1997). *Comprehensive Gang Project*. Washington, DC: U.S. Department of Justice.

Bureau of Justice Statistics (1991). *Teenage Victims: A National Crime Survey Report*. Washington, DC: U.S. Department of Justice.

Burgan, L. and Rubel, R. (1980). "Public School Security: Yesterday, Today, and Tomorrow." *Journal of Contemporary Education* 52(1):13-17.

California Department of Education (1988). *A Report to the California State Legislature Regarding the Standard School Reporting Program*. Sacramento, CA: Author.

California Department of Education (1990). *School Crime in California for the 1988-89 School Year* (4th annual report). Sacramento, CA: Author.

Callahan, C. and F. Rivara (1992). "Urban High School Youth and Handguns: A School-Based Survey." *Journal of the American Medical Association*, (267), 3038-3042.

Campbell, D. and J. Stanley (1963). *Experimental and Quasi-Experimental Design for Research.* Chicago, IL: Rand McNally.

Centers for Disease Control and Prevention (1991). "Weapon Carrying Among High School Students." *Journal of the American Medical Association* 266:2342.

Centers for Disease Control and Prevention (1992). "Physical Fighting Among High School Students - United States, 1990." *Morbidity and Mortality Weekly Report*, 41, 91-94.

Cernkovich, S. and P. Giordano (1992). "School Bonding, Race, and Delinquency." *Criminology* 30(2):261-291.

Chaiken, M. (1993). *The Girls Incorporated Teens for Teens Project.* Lincoln, MA: LINC, Inc.

Checkoway, B. (1993). "High Hopes for U.S. Youth; Which Image Will Prevail?" *Omaha World-Herald*, February 9.

Comer, J. (1988). "Educating Poor Minority Children." *Scientific American*, 259:42-48.

Committee for Children (1992). *Second Step: A Violence Prevention Curriculum (Preschool-Kindergarten Teacher's Guide).* Seattle, WA: Author.

Community Policing Consortium (1994). *Understanding Community Policing: A Framework for Action.* Washington, DC: Bureau of Justice Assistance.

Cook, T. and Campbell, D. (1979). *Quasi-Experimentation.* Chicago, IL: Rand McNally.

Corder, B.; T. Haizlip; R. Whiteside; and M. Vogel (1980). "Pre-therapy Training for Adolescents in Group Psychotherapy: Contracts, Guidelines, and Pre-therapy Prepartation." *Adolescence* 15:699-706.

Cordner, G. (1985). "The Baltimore County Citizen Oriented Police Enforcement (COPE) Project: Final Evaluation." *Final Report to the Florence V. Burden Foundation.* Baltimore, MD: University of Baltimore.

Cordner, G. (1990). "The Police on Patrol." In D. Kenney (ed), *Police and Policing.* New York, NY: Praeger.

DeJong, W. (1986). *Project DARE Evaluation Results.* Washington, D.C.: National Institute of Justice.

DeJong, W. (1987). *Arresting the Demand for Drugs: Police and School Partnerships to Prevent Drug Abuse.* Washington, D.C: National Institute of Justice.

DeParle, J. (1991). "Without Fanfare, Blacks March to Greater High School Success." *New York Times* 9 June:1,14.

Delaware Health and Social Services (1993). *Evaluative Review: Findings from a Study of Selected High School Wellness Centers in Delaware.* Minneapolis, MN: The National Adolescent Health Resource Center, University of Minnesota.

Dixon, M. and W. Wright (1974). *Juvenile Delinquency Prevention Programs: An Evaluation of Policy Related Research.* Nashville, TN: Office of Educational Services, Peabody College.

Duffee, D. (1997). "Working With Communities." In Q. Thurman and E. McGarrell (eds), *Community Policing in a Rural Setting.* Cincinnati, OH: Anderson Publishing Company.

Eagle, E. (1988). *A Descriptive Summary of 1980 High School Seniors Six Years Later: High School and Beyond.* Washington,

DC: Office of Educational Research and Improvement, Department of Education.

Eck, J. (1992). *Police and Drug Control.* Washington, DC: Police Executive Research Forum.

Eck, J. and W. Spelman (1987). *Problem Solving: Problem-Oriented Policing in Newport News.* Washington, DC: Police Executive Research Forum.

Elias, M. and R. Weissberg (1990). "School-Based Social Competence Promotion as a Primary Prevention Strategy: A Tale of Two Projects." In R. Lorion (ed.), *Protecting the Children: Strategies for Optimizing Human Development.* New York, NY: Haworth.

Elliott, D. and S. Ageton (1980). "Reconciling Race and Class Differences in Self-Reported and Official Estimates of Delinquency." *American Sociological Review* 45:142-154.

Federal Bureau of Investigation (1994). *Crime in the United States, 1993.* Washington, DC: Author.

Florida Association of District School Superintendents and Florida Education Association United (1992, October 13). "Coalition Survey of Public School Crime, Violence Includes Call for Action, More State Involvement." News Release by author.

Furlong, M. and G. Morrison (1994). "Introduction to Miniseries: School Violence and Safety in Perspective." *School Psychology Review* 23:139-150.

Garrison, R. (1989). *Notable School Crime and Violence Statistics Since 1978.* Malibu, CA: National School Safety Center.

Geller, W. (1994). *Summoning the Village: A Collaborative Approach to Protecting Children from Violence.* Washington, DC: Police Executive Research Forum.

George Gallup International Institute (1994). *Violence and Teens in the Home and in the Schools in the 1990s.* Lincoln, NE: Author.

Goldstein, A.; R. Sprafkin; N. Gershaw; and P. Klein (1980). *Skill-streaming the Adolescent.* Champaign, IL: Research Press.

Goldstein, H. (1979). "Improving Policing: A Problem-Oriented Approach." *Crime and Delinquency,* 25:236-258.

Goldstein, H. (1990). *Problem Oriented Policing.* New York, NY: McGraw-Hill.

Goldstein, H. and C. Susmilch (1982). "The Problem-Oriented Approach to Improving Police Service." Madison, WI: University of Wisconsin Law School.

Gottfredson, G. (1984). *The Effective School Battery.* Odessa, FL: Psychological Assessment Resources.

Gottfredson, G. (1991). *The Effective School Battery: Users Manual.* Odessa, FL: Psychological Assessment Resources.

Gottfredson, D. (1986). "An Empirical Test of School-Based Environmental and Individual Interventions to Reduce the Risk of Delinquent Behavior." *Criminology* 24:705-713.

Gottfredson, D. (1996). "Delinquency Prevention in Schools." Baltimore, MD: The University of Maryland.

Gottfredson, D. (1997). "School-Based Crime Prevention." In L. Sherman et al., *Preventing Crime: What Works, What Doesn't, What's Promising. A Report to the United States Congress.* Washington, DC: National Institute of Justice.

Gottfredson, G. and D. Gottfredson (1985a). *School Size and School Disorder.* (Center for Social Organizations of Schools Report No. 306). Baltimore, MD: Johns Hopkins University.

Gottfredson, G. and D. Gottfredson (1985b). *Victimization in Schools*. New York, NY: Plenum Press.

Graham, J. (1988). *Schools, Disruptive Behavior, and Delinquency: A Review of Research*. London, U.K: Her Majesty's Stationery Office.

Greene, J. and S. Mastrofski, eds. (1988). *Community Policing: Rhetoric or Reality*. New York, NY: Praeger.

Greene, J. and C. Klockars (1991). "What Police Do," in C. Klockars and S. Mastrofski (eds), *Thinking About Police* (2nd Edition). New York, NY: McGraw-Hill.

Gutkin, T. and M. Ajchenbaum (1984). "Teachers' Perceptions of Control and Preferences for Consultative Services." *Professional Psychology: Research and Practice*, 15:565-570.

Hagan, J. (1985). *Modern Criminology: Crime, Criminal Behavior, and Its Control*. New York, NY: McGraw-Hill.

Hall, J. (1993). "The Knife in the Book Bag." *Time*, May, 22.

Hammond, W. and B. Yung (1993). "Psychology's Role in the Public Health Response to Assaultive Violence Among Young African-American Men." *American Psychologist*, 48:142-154.

Harris, L. (1993a). *A Survey of the American People on Guns as a Children's Health Issue*. Unpublished survey, prepared for the Harvard School of Public Health under a grant from the Joyce Foundation.

Harris, L. (1993b). *A Survey of Experiences, Perceptions, and Apprehensions About Guns Among Young People in America*. Unpublished survey, prepared for the Harvard School of Public Health under a grant from the Joyce Foundation.

Harvey, R. (1987). "The School Based Community Police Officer." In D. Challinger, (ed.)., *Crime at School.* Australian Institute of Criminology.

Hawkins, J. and J. Weis (1985). "The Social Development Model: An Integrated Approach to Delinquency Prevention." *Journal of Primary Prevention* 73-97.

Henig, J. (1984). *Citizens Against Crime: An Assessment of the Neighborhood Watch Program in Washington, D.C.* Washington, D.C.: Center for Washington Area Studies, George Washington University.

Hirschi, T. (1969). *Causes of Delinquency.* Berkeley, CA: University of California Press.

Hollister, W. and F. Miller (1977). "Problem-Solving Strategies in Consultation." *American Journal of Orthopsychiatry* 47:445-450.

Hoover, J.; R. Oliver; and R. Hazler (1992). "Bullying The Perceptions of Adolescent Victims in the Midwestern :USA." *School Psychology International,* 13:516.

Institute for Social Research (1990). *1989 Survey Results from Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth.* Ann Arbor, MI: University of Michigan.

Jessor, R. and S. Jessor (1977). *Problem Behavior and Psychological Development: A Longitudinal Study of Youth.* San Diego, CA: Academic Press.

Johnson, G. and R. Hunter (1986). *Law-Related Education as a Delinquency Prevention Strategy: A Three-Year Evaluation of the Impact of LRE on Students.* Boulder, CO: Center for Action Research.

Kaplan, H.B. (1980). *Deviant Behavior in Defense of Self.* New York, NY: Academic Press.

Kazdin, A. (1993). "Adolescent Mental Health: Prevention and Treatment Programs." *American Psychologist* 48:127-141.

Kenney, D. (1987). *Crime, Fear, and the New York City Subways.* New York, NY: Praeger.

Kenney, D. and S. Watson (1992). "Improving School Safety by Empowering Students." *The Educational Forum* 57:50-62.

Kenney, D.; A. Pate; and E. Hamilton (1990). *Police Handling of Juveniles: Developing Model Programs of Response.* Washington, DC: Police Foundation.

Koba, S. (1993). "What Works for a Prize-Winning Teacher: Building Community, Student-Centered Classroom, Quality World." *Omaha World-Herald,* March 5:17.

Kratochwill, T.; S. Elliott; and P. Rotto (1990). "Best Practices in Behavioral Consultation." In A. Thomas and J. Grimes (eds.), *Best Practices in School Psychology-II.* Washington, DC: National Association of School Psychologists.

Larson, J. (1994). "Violence Prevention in the Schools: A Review of Selected Programs and Procedures." *School Psychology Review* 23:151-164.

Lavrakas, P. and E. Herz (1982). "Citizen Participation in Neighborhood Crime Prevention." *Criminology* 20: 3-4.

Law Enforcement Management Institute of Texas (LEMIT) (1995). "Independent School District Police." *Telemast Bulletin.* Huntsville, TX: Sam Houston State University.

Law Enforcement News (1995). "Dallas School Opts to 'Overdo' Protective Measures." 15 November:3.

Lazarus, A. (1976). *Multimodal Behavior Therapy.* New York, NY: Springer.

Lewis, J. (1978). "Some Views on Secondary Analysis or the Politics of Reanalysis from a Particular Perspective." In R. Baruch and P. Wortman (eds.), *Secondary Analysis of Social Program Evaluation.*

Lewis, D. and M. Maxfield (1980). "Fear in the Neighborhoods: An Investigation of the Impact of Crime." *Journal of Research in Crime and Delinquency,* 17(July):197-212.

Mansfield, W.; D. Alexander; and E. Farris (1991). *Teacher Survey on Safe, Disciplined, and Drug-Free Schools.* Washington, DC: U.S. Department of Education.

Marriott, M. (1990). "A New Road to Learning: Teaching the Whole Child." *New York Times,* 13 June:A1.

Merton, R. (1957). *Social Theory and Social Structure.* Glencoe, IL: The Free Press.

Metropolitan Life Survey (1993). *Violence in America's Public Schools.* Hartford, CT: Author.

Miller, W. (1958). "Lower Class Culture as a Generating Milieu of Gang Delinquency." *Journal of Social Issues,* 14(3):5-19.

Miller, M.; J. Midgett; and M. Wicks (1992). "Student and Teacher Perceptions Related to Behavior Change After Skillstreaming Training." *Behavior Disorders* 17:291-295.

Morrison, G.; M. Furlong; and R. Morrison (1994). "School Violence to School Safety: Reframing the Issues for School Psychologists." *School Psychology Review* 23:236-256.

National Center for Educational Statistics (1989). *The Condition of Education, 1989.* Washington, D.C: U.S. Department of Education, Office of Education Research and Improvement.

National Center for Educational Statistics (1993). *America's High School Sophomores: A Ten-Year Comparison.* Washington, DC: U. S. Department of Education, Office of Educational Research and Improvement.

National Educational Goals Report (1993). *Carrying Weapons to School: The National Educational Goals Report, Building a Nation of Learners. Volume One: The National Report.* Washington, DC: Government Printing Office.

National Institute of Education (1978). *Violent Schools - Safe Schools: The Safe School Study Report to the Congress.* Washington, DC: U.S. Department of Education.

National Institute of Justice (1994). *Preventing Interpersonal Violence Among Youths.* Washington, DC: Author.

National Parents' Resource Institute for Drug Education (1994). *Summary of Results - Students' Survey.* Atlanta, GA: Pride, Inc.

National School Boards Association (1993). *Violence in the Schools: How America's School Boards Are Safeguarding Our Children.* Washington, DC: Author.

National School Safety Center (1989). "AFT Safety Survey Validates Problems." *School Safety,* Fall 1989.

National School Safety Center (1989). "School Crime: Annual Statistical Snapshot." *School Safety,* Winter 1989.

North Carolina Governor's Crime Commission (1993). *School Violence Survey Report.* Raleigh, NC: North Carolina Department of Crime Control and Public Safety, Governor's Crime Commission.

Oettmeier, T. and M. Wycoff (1996). *Planning and Implementation Issues for Community Oriented Policing: The Houston*

Experience. Washington, D.C.: Police Executive Research Forum.

Office of Juvenile Justice and Delinquency Prevention (1986a). *Habitual Juvenile Offenders: Guidelines for Schools*... Washington, D.C: U.S. Department of Justice.

Office of Juvenile Justice and Delinquency Prevention (1986b). "School Safety Programs." *Juvenile Justice Technical Assistance Bulletin*...Washington, DC: U.S. Department of Justice.

Office of Juvenile Justice and Delinquency Prevention (1990). "Education in the Law: Promoting Citizenship in the Schools." *OJJDP Update on Programs*...Washington, D.C: U. S. Department of Justice.

Office of Superintendent of Public Instruction (1994). *Relating Risk Behaviors: Selected Analyses of the Washington State Survey of Adolescent Health Behaviors*...Seattle, WA: Author.

Olweus, D. (1991). "Bully/Victim Problems Among School Children: Basic Facts and Effects of a School-Based Intervention Program." In I. Rubin and D. Pepler (eds.), *The Development and Treatment of Childhood Aggression*.. Hillsdale, NJ: Erlbaum.

Pate, A. and S. Annan (1989). *The Baltimore Community Policing Experiment: Technical Report*... Washington, D.C.: Draft Report Submitted to the National Institute of Justice.

Phillips, B. (1992). "School Problems of Adolescents." In C. Walker and M. Roberts (eds.), *Handbook of Clinical Child Psychology* (2nd Edition). New York, NY: John Wiley and Sons.

Pressman, J. and A. Wildavsky (1973). "A Critical View of the Uniform Crime Reports." *University of Michigan Law Review*, 64.

Prothrow-Stith, D. (1987). *Violence Prevention Curriculum for Adolescents.* Newton, MA: Education Development Center, Inc.

Pryzwansky, W. and G. White (1983). "The Influence of Consultee Characteristics on Preferences for Consultation Approaches." *Professional Psychology: Research and Practice,* 14:457-461.

Pursuit, D.; J. Gerletti; R. Brown; and S. Ward (1972). *Police Programs for Preventing Crime and Delinquency.* Springfield, IL: Charles C. Thomas.

Reckless, W. (1961). "A New Theory of Delinquency and Crime." *Federal Probation* 25:42-46.

Reed, R. (1988). "Education and Achievement of Young Black Males." In J. Gibbs (ed.), *Young, Black, and Male in America: An Endangered Species.* Dover, MA: Auburn House.

Reid, J. and G. Patterson (1991). "Early Prevention and Intervention With Conduct Problems: A Social Interactional Model for the Integration of Research and Practice." In G. Stoner; M. Shinn; and H. Walker (eds.), *Interventions for Achievement and Behavior Problems.* Washington, DC: National Association of School Psychologists.

Reinking, R.; G. Livesay; and M. Kohl (1978). "The Effects of Consultation Style on Consultee Productivity." *American Journal of Community Psychology,* 6:283-290.

Richardson, J. (1974). *Urban Police in the United States.* Port Washington, NY: Kennikat Press.

Ringwalt, C.; S. Ennett; and K. Holt (1991). "An Outcome Evaluation of Project DARE." *Health Education Research* 6:327-337.

Rosenbaum, D. (1982). "Police Responses: Conventional and New Approaches to Local Crime Problems." Paper presented at the American Psychological Association annual convention, Washington, D.C.

Rossi, P.; H. Freeman; and S. Wright (1979). *Evaluation: A Systematic Approach.* Beverly Hills, CA: Sage

Rubel, R. (1989). "Cooperative School System and Police Responses to High Risk and Disruptive Youth." *Violence, Aggression, & Terrorism: An International Journal* Winter Edition.

Rubel, R. and N. Ames (1986). *Reducing School Crime and Student Misbehavior: A Problem-Solving Strategy.* Washington, D.C: National Institute of Justice.

Schinke, S.; G. Botvin; and M. Orlandi (1991). *Substance Abuse in Children and Adolescents: Evaluation and Intervention.* Newbury Park, CA: Sage.

Schneider, B.; G. Attili; J. Nadel; and R. Weissberg, eds. (1989). *Social Competence in Developmental Perspective.* Norwell, MA: Kluwer Academic.

Sellin, T. (1938). *Culture Conflict and Crime.* New York, NY: Social Science Research Council.

Shaw, C. and H. McKay (1942). *Juvenile Delinquency and Urban Areas.* Chicago, IL: University of Chicago Press.

Sheley, J.; Z. McGee; and J. Wright (1995). *Weapon Related Victimization in Selected Inner-City High School Samples.* Washington, DC: National Institute of Justice.

Sherman, L. (1987). *Repeat Calls to Police in Minneapolis.* Washington, DC: Crime Control Institute.

Sherman, L.; D. Gottfredson; D. MacKenzie; J. Eck; P. Reuter; and S. Bushway (1997). *Preventing Crime: What Works, What Doesn't, What's Promising. A Report to the United States Congress.* Washington, DC: National Institute of Justice.

Shonholtz, R. (1995). "The Citizen's Role in Justice: Building a Primary Justice and Prevention System at the Neighborhood Level." In F. Scarpitti and F. Cylke (eds.), *Social Problems: The Search for Solutions.* Los Angeles, CA: Roxbury Press.

Shure, M. (1994). *I Can Problem Solve (ICPS): An Interpersonal Cognitive Problem-Solving Program for Children.* Champaign, IL: Research Press.

Siegel, L. and J. Senna (1988). *Juvenile Delinquency: Theory, Practice, and Law* (3rd Edition). St. Paul, MN: West Books.

Skogan, W. and M. Maxfield (1981). *Coping With Crime.* Beverly Hills, CA: Sage Publications.

Skolnick, J. and D. Bayley (1988). *Community Policing: Issues and Practices Around the World.* Washington, D.C.: National Institute of Justice.

Smith, H. (1989). "Group vs. Individual Problem Solving and Type of Problem Solved." *Small Group Behavior* 20:357-366.

Soriano, M., F. Soriano, and E. Jimenez (1994). "School Violence Among Culturally Diverse Populations: Sociocultural and Institutional Considerations." *School Psychology Review* 23:216-235.

South Carolina Department of Education (1993). *School Crime Incidents in South Carolina Public Schools, June 1991 through May 1992.* Columbia, SC: Author.

Stephens, R. (1994). "Planning for Safer and Better Schools: School Violence Prevention and Intervention Strategies." *School Psychology Review* 23:204-215.

Steinberg, L.; S. Dornbusch; and B. Brown (1992). "Ethnic Differences in Adolescent Achievement: An Ecological Perspective." *American Psychologist*, 47:723-729.

Suchman, E. (1967). *Evaluative Research*. New York, NY: Russell Sage Foundation.

Sutherland, E. (1947). *Criminology* (4th edition). Philadelphia, PA: Lippincott.

Sutherland, E. and D. Cressey (1960). *Principles of Criminology* (6th edition). New York, NY: Lippincott.

Sykes, G. and D. Matza (1957). "Techniques of Neutralization: A Theory of Delinquency." *American Sociolgical Review* 22:664-670.

Takanishi, R. (1993). "The Opportunities of Adolescence-Research, Interventions, and Policy: Introduction to the Special Issue." *American Psychologist* 48:85-87.

"These Perilous Halls of Learning." *U.S. News and World Report* 106:68-69.

Toby, J. (1983). "Violence in School." *Crime and Justice: An Annual Review of Research*, Vol. 4. Chicago, IL: The University of Chicago Press.

Toch, T; T. Gest; and M. Guttman (1993). "Violence in Schools: When Killers Come Home." *U.S. News and World Report*, 8 November.

Travis, J.; G. Lynch; and R. Wagner (1993). *Rethinking School Safety: the Report of the [New York City School] Chancellor's Advisory Panel on School Safety.* New York, NY: John Jay College of Criminal Justice.

Trojanowicz, R. and B. Bucqueroux (1990). *Community Policing: A Contemporary Perspective.* Cincinnati, OH: Anderson Publishing.

Urban Coalition of Minneapolis (1992). *The Next Generation: The Health and Well Being of Young People of Color in the Twin Cities.* Minneapolis, MN: Author.

Vestermark, S. (1971). *Responses to Collective Violence in Threat or Act.* Vol. 1. Springfield, VA: National Technical Information Service, Collective Violence in Educational Institutions.

Waller, I. (1979). "What Reduces Residential Burglary?" Paper presented at the Third International Symposium on Victimology. Muenster, West Germany.

Warr, M. (1993). "Age, Peers, and Delinquency." *Criminology,* 31(1):17-40.

Washington Post (1997). "Kentucky Shooting Inquiry Yields No Sign of Plot; Sheriff Still Suspicious." December 9, 1997, A12.

Wayson, W. (1985). "The Politics of Violence in School: Doublespeak and Disruptions in Public Confidence." *Phi Beta Kappan,* 67:127-182.

Webster, B.; S. Wallace; J. McEwen; J. Eck; and D. Hill (1989). *Evaluation of Community Crime/Problem Resolution through Police Directed Patrol: Executive Summary.* Alexandria, VA: Institute for Law and Justice.

Weick, K. (1984). "Small Wins: Redefining the Scale of Social Problems." *American Psychologist*, 39(1):40-49.

Weissberg, R.; A. Jackson; and T. Shriver (1993). "Promoting Positive Social Development and Health Practices in Young Urban Adolescents." In M. Elias (ed.), *Social Decision Making and Life Skills Development: Guidelines for Middle School Educators* (pp. 45-78). Gaithersberg, MD: Aspen.

Wheeler, E. and A. Baron (1993). *Violence in Our Schools, Hospitals, and Public Places: A Prevention and Management Guide*. Ventura, CA: Pathfinder Publishing.

Whitaker, C. and L. Bastian (1991). *Teenage Victims: A National Crime Survey Report*. Washington, DC: Department of Justice, Office of Justice Programs, Bureau of Justice Statistics (#NCJ-128129).

Wilson, J. and R. Herrnstein (1985). *Crime and Human Nature*. New York, NY: Simon and Schuster.

Wilson, J. and G. Kelling (1982). "Broken Windows." *The Atlantic Monthly* (March).

Wolfgang, M.; R. Figlio; P. Tracy; and S. Singer (1985). *The National Survey of Crime Severity*. Washington, D.C.: Bureau of Justice Statistics.

Wycoff, M. (1988). "The Benefits of Community Policing: Evidence and Conjecture." In J. Greene and S. Mastrofski (eds.), *Community Policing: Rhetoric or Reality*. New York, NY: Praeger.

Yin, R. (1979). "What is Citizen Crime Prevention?" In *How Well Does it Work? Review of Criminal Justice Evaluation, 1978*. Washington, D.C: National Institute of Law Enforcement and Criminal Justice, U.S. Government Printing Office.

APPENDIX A: STATEMENTS OF SCHOOL SUPPORT

Administrative Support for the Program
(Principal's Presentation to the West Mecklenburg High School Junior Class Regarding the Problem-Solving Program)

It is my pleasure to welcome you back as juniors. You have now assumed the role of leaders in our school community and as leaders you will be involved in an exciting program. Although we have always stressed the importance of civic responsibility to all students, this year we are adding a special problem-solving component to your coursework.

Why was the junior class chosen for this effort? Because you are the leaders of the school! You act as role models for the underclassmen. When the underclassmen see you operating as effective problem solvers, they will follow your lead. In your senior year you will be able to transfer the use of these leadership and problem-solving skills and continue to serve your community.

In a global sense, you will also become the good will ambassadors for the school. From your student directed activities and use of effective decision-making skills, you will promote a positive image of the school in the larger community.

This brings me to the focal point of the civic responsibility program - community. The program objective is to have you identify the school as your community and take pride and ownership in it. This will be accomplished in three parts: developing civic responsibility, developing social responsibility, and developing problem-solving skills.

Civically, you will encourage participation in school activities, clubs, sporting events, and other activities. A major project

of the problem-solving course may be to organize and promote the voter registration campaign for your fellow students. If you are registered you can go to the polls and vote in the November elections. It is our goal to have the highest percentage of voters registered and voting in the school system.

Socially, we will concentrate on helping you develop skills that will enable you to be successful in relating to your peers, the school's administrators, and your teachers.

Finally, the newest component of civic responsibility at school is problem solving. You will be asked to identify the problems and your concerns at school and devise strategies and plans to bring about positive changes. Using the four-step problem-solving method will teach you how to become critical thinkers that will help you in your pursuit of academic excellence. You will be engaging in research activities that might include devising and administering surveys and conducting interviews in order to determine what the real concerns at the school are. In your endeavors you will enjoy the full support of the school and extended communities. We are here to help you in your research and provide you with whatever resources are available to see your plans through. This includes all administrators, teachers, counselors, the student government, PTA, and the school resource officer. This program also has the full support of the police department who, if you decide it to be necessary, will be available as a resource. Also, within the school system, we have the endorsement of the Board of Education and the Central Office personnel. These folks are ready and expecting to hear from you.

In conclusion, you are leaders of the school who, by being civically responsible, and carefully identifying and solving its problems will make our school a safe and successful community.

Police Support for the Program
(Police Resource Officer's Presentation to the West Mecklenburg High School Junior Class Regarding the Problem-Solving Program)

You all know who I am; so, I am not going to introduce myself. What I've been asked to do is to come in and talk to you about community policing and how that concept shadows the model program you all will be taking part in at school this year.

First, I want to talk about community policing and how it relates to you and how it relates to your civic responsibility class. How many of you can remember ever talking to your parents or someone elderly in your community and they said: "Yeah, I remember back when you used to be able to leave your windows open and not lock your doors."? Do you feel secure doing that today? The difference is that back then, the community was really involved in what happened around it.

I lived in a small town as I grew up and I saw this a whole bunch. Maybe not in Charlotte, but when I grew up, everything I did in the neighborhood was reported back to my parents. I'll give you an example. Let's take the store owner. While he or she is looking out of the window or cleaning up, he might see someone getting ready to vandalize a wall or do something to a vehicle.

What do you think he would have done in those good old days so many people refer to? (Students respond.) Maybe intervene and stop it himself. And maybe, since he knew most everyone in the neighborhood, he would have also told the parents of the vandal. You are on the same wave length I am with what it used to be like.

What would happen today, however? (Students respond.) Let the vandal do it? Shoot him? Just don't care? You may be right and it's really a shame. Today we see a lot of: "It doesn't affect me, so why should I get involved?" And the police department is then called in to handle whatever the problem may be. The person who sees the problem doesn't have time, doesn't want to fool with it, or is afraid of revenge or repercussions

to themselves so they call the police because they are About four years ago, we started community policing in Charlotte and you know what, we found the same thing. Back in those good old days when you could leave your windows open, the store owner in Charlotte would go out and handle problems in his or her community. Today, we've tried to recreate that feeling by sending police officers out to talk to the public to find out what kind of concerns they have and what kind of changes they want. The police officer in charge of the area becomes a resource to help the community.

Now a couple of years ago some people familiar with this concept came up with the idea that we need to practice this community approach with our schools -- that younger people should be responsible for their communities as well. As they discussed the idea with your school officials, they all agreed and your problem-solving classes were the result. And here's how they can work.

Instead of thinking of where you live as the community you belong to, we want you think of your school in the same way. Where better - a lot of kids are here at least 10 to 12 hours a day when you include after class events like football and other sports, clubs, and so forth. So this is a community; it's another home for all of you. Since you are the primary residents, it is up to you to identify the problems and concerns and suggest possible changes and improvements. To do so, your teachers and I are going to show you a four-step plan that will help.

The first thing you do is to identify a problem. You come to school, and you see the things that need to be changed. You see things that are problems and you want to make them better.

Next, however, you analyze those problems so that you can understand them better. Why is each a problem? How long has each been a problem? When do they occur and who do they affect? To answer these questions you go out into your community and you collect information that is related. You might have to do a survey; you might do interviews -- the point is to learn everything you can about the problems you have identified. Then you are ready to create some solutions that just might work.

Now all of this might sound pretty hard at first but believe me the results are worth it. In addition, your teachers have worked hard all summer to break the process down into small steps so that the process will be easier to understand and manage. So as you proceed during the year, remember that the police department and I, as well as lots of others, are here to help you as your problem-solving groups decide what is necessary. Let's work together to make your community a better one to be in.

ABOUT THE AUTHORS

Dennis Jay Kenney is currently an Associate Director and the Director of Research for the Police Executive Research Forum (PERF). He has over 27 years of experience in varied aspects of criminal justice—as a Florida police officer; as a director of research and planning in Savannah, Georgia; as a project director for the Police Foundation; and as university professor at both the Western Connecticut State University and the University of Nebraska at Omaha. He is the author or co-author of numerous articles and books, including *Crime, Fear and the New York City Subways* (1986); *Organized Crime in America* (1995); *Managing Police Organizations* (1996); *Managing Police Personnel* (1997); and *Police Pursuits: What We Know* (to be released in September 1998). Additionally, Dr. Kenney has provided consulting services to police agencies around the country, has managed sponsored research and technical assistance projects and is past editor of the *American Journal of Police*. At present, he is completing funded research projects on police performance evaluations; police fatigue and its impact on officer performance; and the nature and extent of abortion-related violence. Dr. Kenney holds a Ph.D. in criminal justice from Rutgers University.

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ABOUT PERF

The Police Executive Research Forum (PERF) is a national professional association of chief executives of large city, county and state law enforcement agencies. PERF's objective is to improve the delivery of police services and the effectiveness of crime control through several means:

1. the exercise of strong national leadership,
2. the public debate of police and criminal issues,
3. the development of research and policy and
4. the provision of vital management leadership services to police agencies.

PERF members are selected on the basis of their commitment to PERF's objectives and principles. PERF operates under the following tenets:

1. Research, experimentation and exchange of ideas through public discussion and debate are paths for the development of a comprehensive body of knowledge about policing.
2. Substantial and purposeful academic study is a prerequisite for acquiring, understanding and adding to that body of knowledge.
3. Maintenance of the highest standards of ethics and integrity is imperative in the improvement of policing.
4. The police must, within the limits of the law, be responsible and accountable to citizens as the ultimate source of police authority.
5. The principles embodied in the Constitution are the foundation of policing.

NOTES

CRIME IN THE SCHOOLS

At the completion of the School Safety program:

- Nine percent of students said they had fought to protect themselves, compared with 22 percent before the program.
- The percentage of students who saw a teacher threatened by another student dropped from 51 percent to 34 percent.
- Only 12 percent of teachers said that vandalism, attack and theft were school problems, compared with 29 percent before the program.
- Student suspensions due to fighting and disruptive behavior fell by 59 percent.

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